IBM SCHWEIZ

CUSTOMER SERVICES IN SWITZERLAND

1987

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SERVICES IN SWITZERLAND

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Abstract

This report presents and summarises data collected from IBM customers in Switzerland who were nominated by IBM SCHWEIZ as part of a survey of the customer service market.

The report is presented in such a way that Service and Marketing directors and managers can assess company performance on critical aspects against that of IBM in Germany and Europe, and against competitive companies throughout Europe. The report can also be used to prepare company responses to surveyed customer views and opinions in order to keep and enhance market share.

The report consists of 140 pages that contain 84 exhibits in addition to the text.

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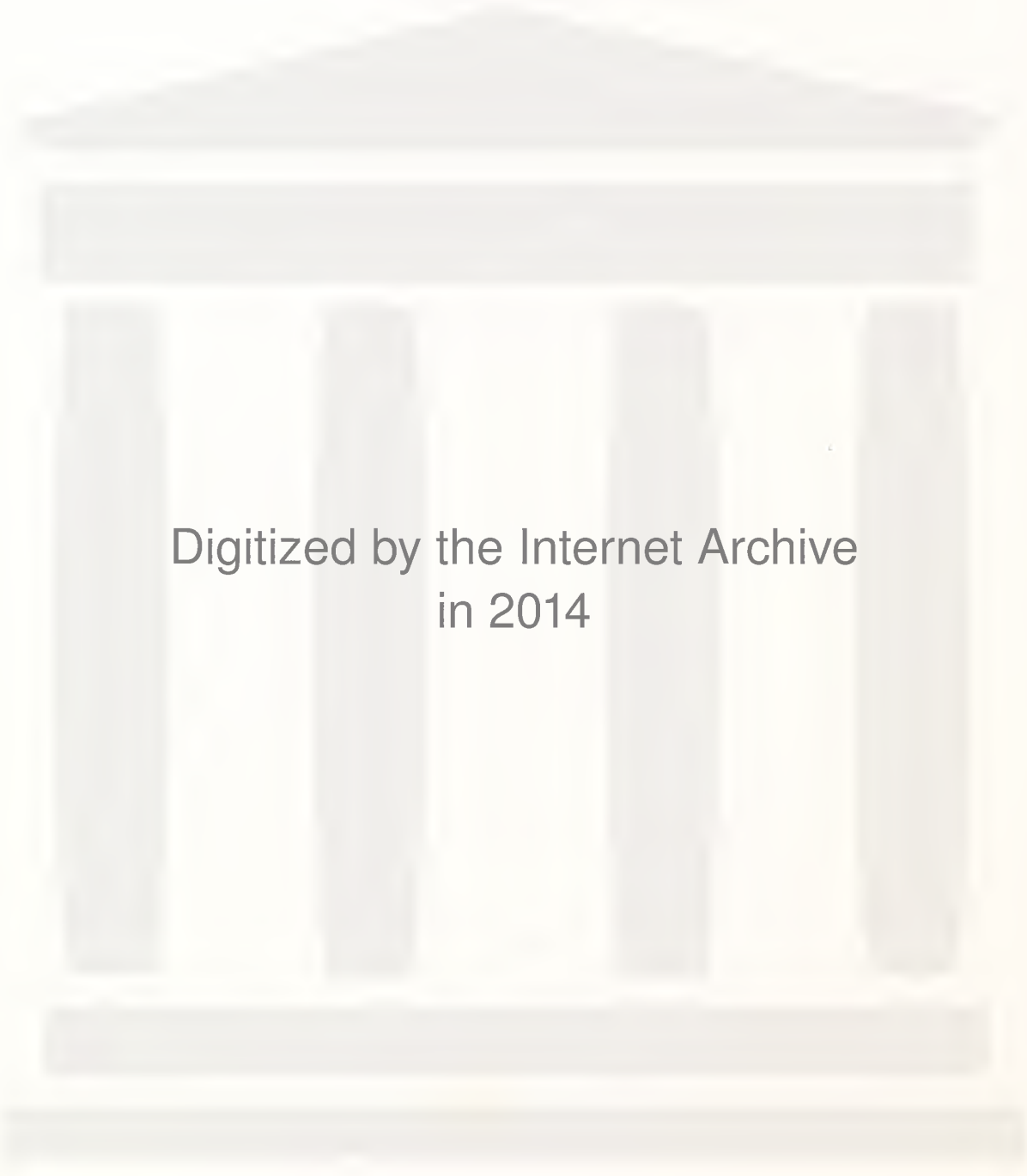
Table of Contents (Continued)

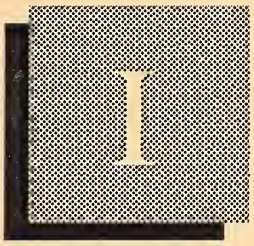


Exhibits

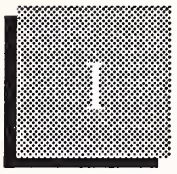
Exhibits (Continued)

V

Exhibits (Continued)



Introduction



Introduction

A Objectives

This report on the IBM SCHWEIZ customer maintenance and service market presents customers' views on many of the important aspects of computer system support, where appropriate compares these views with similar data from Germany and Europe as a whole, and seeks to give a balanced consultative set of findings.

These views are derived from a sample of 87 customers spread across the three major language groups in Switzerland. A breakdown of the sample size is given in Exhibit I-1

The analysis in this report is presented in order for service directors and managers to have a reference point against which to gauge current performance and future needs and possibilities.

EXHIBIT I-1

IBM SCHWEIZ

SAMPLE SIZE AND NUMBER OF CPU'S

MODEL	SITES	CPU'S
38	26	28
3081	24	29
3090	13	16
4381	11	18
4361	4	4
3083	3	4
Others	6	11
TOTAL	87	110

Customer Sample: 87

B

Methodology

For this report, 87 customers were interviewed by telephone in their native language; customers were selected from a list supplied by IBM SCHWEIZ. The breakdown by job titles of the customer representatives responding to the questionnaire is given in Exhibit I-2.

The basis of the interview was a questionnaire concerning some 150 aspects of support and maintenance, compiled with the help of the major service vendors, and amended slightly to meet the requirements of IBM SCHWEIZ.

Each interview, mostly with either the DP manager or Head of Department, took some 45 minutes to complete.

EXHIBIT I-2

IBM SCHWEIZ
RESPONDENTS' TITLES BY MODEL NUMBER

MODEL	DP MANAGER	INFO SERVICES MANAGER	SYSTEM OPS MANAGER	HEAD OF DEPT	OWNER
3081	22			2	
3083	2	1			
3090	12			1	
38	23	1	1		1
4361	4				
4381	10			1	
Others	5	1			
TOTAL	78	3	1	4	1

Sample Size: 87

In order to assess system criticality in any business sector, data was extracted on the actual use of the customer's computer in order to determine the possible criticality of the system, or any 'culture' bias in the results. The differences in business types are illustrated in Exhibits I-3 through I-5.

Exhibit I-6 lists the countries in Europe from which the overall sample population of 1322 was taken. The results of this European data is included as reference points at certain places in the text.

A guide to the interpretation of the statistics is given in the next chapter; it is essential, in order to make the maximum use of the data in this report, to read this section first.

EXHIBIT I-3

IBM SCHWEIZ
BUSINESS SECTORS

SECTOR	SAMPLE	PERCENTAGE
Finance	38	43
Manufacturing	21	24
Distribution	12	14
Public Utilities & Government	11	13
Other Services	5	6
TOTAL	87	100

Question 1d: How would you describe the main activity your organisation is engaged in?

EXHIBIT I-4

GERMANY
BUSINESS SECTORS

SECTOR	SAMPLE	PERCENTAGE
Distribution	19	9
Finance	23	10
Government	8	4
Manufacturing	154	69
Public Sector	7	3
Other Services	12	5
TOTAL	223	100

EXHIBIT I-5

IBM EUROPE
BUSINESS SECTORS

SECTOR	SHARE	PERCENTAGE
Manufacturing	90	43
Finance	55	26
Distribution	28	13
Other Services	18	9
Public Sector	15	7
Government	4	2
TOTAL	210	100

EXHIBIT I-6

EUROPEAN COUNTRIES SURVEYED (COMPARISON)

Belgium
Denmark
France
Germany
Holland
Italy
Norway
Sweden
United Kingdom

C Report Structure

The chapters of this report comprise the following information:

Chapter II explains the basis of the statistics and a correct method of interpretation, together with ways of doing simple comparisons.

Chapter III gives an executive overview and a summary of the key data, together with a review of trends in the customer population.

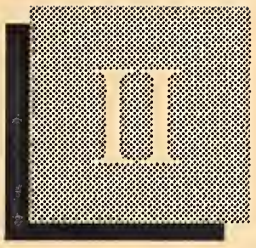
Chapter IV details the satisfaction with aspects of hardware and software and satisfaction ratings for the main aspects across different IBM models.

Chapter V gives comparative figures for IBM in Europe, with the different aspects of service in detail.

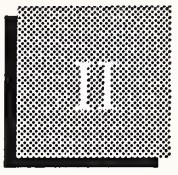
Chapter VI deals with aspects of hardware and software pricing, and also with customer expectations of what the increases or decreases should be.

Chapter VII is concerned with the type of maintenance contracts, and which vendors currently supply the service.

Chapter VIII gives details of level of interest in other services, and also of the types of training most required.



Interpretation of the Data



Interpretation of the Data

A

Definitions

Software - operating systems software, NOT applications

Hardware - any computer or peripheral

Population - the full sample of 87; for Europe as a whole, the full sample of 1322; for Germany, the full sample of 223

Population Mean - the average of all the values against a specific question

Standard Error - (of the mean) is the standard deviation of the sample divided by the square root of the sample size, eg. the square root of 87 = 9.33. Due to the large sample size, a Bessels correction has not been used, but this would be advisable for cell sizes below 20.

B

Population Means and Standard Error

Throughout this report the mean value of the entire 87 sample population is presented against the mean values of the lesser samples for each piece of data in order that a quick impression can be gained of general deviations from the norm.

In the tables of importance and satisfaction with the different service aspects, the figures at the bottom of each table are the individual population means (averages) of the data above.

In addition, the standard error for the total sample is given in order for a more exacting test of significance (or of deviations from the norm or average) to be applied.

In general, the collections of values from a large sample follow a normal distribution. A deviation of the mean of a company's data that is more than four times the standard error from either the German or European sample population means is very unlikely; hence the deviation would indicate a significant difference.

To be exact, in statistical terms, the probability that the mean for the total of all customers in Europe is more than three times the standard error of the mean for the sample (1322) away from that sample mean is of the order of 0.3%.

However, in some of the data, for instance that relating to response and repair times, there are a number of respondents who, obviously dissatisfied, have put in very long times that are not representative of the general performance levels. This abnormality leads to distribution skew and needs to be taken into account when interpreting means and standard deviations.

The standard indicator of skew is whether the modal minus the mean values are greater than three times the mean minus the median values, but skew can be more quickly detected in the INPUT data by where the standard deviation encompasses zero, ie., the SD must be displaced from the mean ABOVE zero.

C

Ratings and Satisfaction Index

Except where otherwise stated, ratings for importance and satisfaction are on a scale of 0 to 10, where:

importance	0 = of no importance whatsoever 5 = of average importance 10 = extremely important
satisfaction	0 = totally and absolutely dissatisfied 5 = average satisfaction 10 = totally satisfied

In general, importance ratings below 7 are NOT significant as an interest level for a new service, and ratings of 5 and below should be treated as marginal UNLESS the number of respondents (for 5 as against 7) justified a different conclusion based on morphological or decision tree analysis.

The satisfaction index (SI) used throughout this report is based on the difference between the importance and satisfaction ratings for specific aspects of service. The questions for importance and satisfaction are asked at the same time and the answers given reflect the respondents' value judgement at that time, hence:

a) Figures of 10 and 10 or 6 and 6, etc, give a difference of zero, indicating that the important needs are completely satisfied.

b) Figures of importance 8 and satisfaction 9 would indicate overfulfillment of the important needs, and would give a satisfaction index of -1 or, in the INPUT text, (1).

c) Figures of importance 6 and satisfaction 5 indicate underfulfillment of the needs, but perhaps customer concern rather than real dissatisfaction.

d) The 'top' part of the satisfaction index scale would look like this:

(1) overfulfilled
0 completely satisfied
1 concerns and worries
2 real dissatisfaction
3 pain level

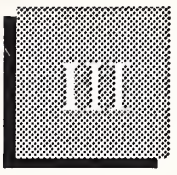
It is the view of INPUT that different country, or even company, cultures can lead to an overall displacement of a scattergram plot either to the left (=less importance) or to the right (=more importance), but that the Satisfaction Index as such eliminates the culture effect.

D

Scattergrams

It is the contention of INPUT that perceived importance declines with increased performance satisfaction; i.e., as the customer becomes more satisfied with any particular service aspect, then others rise in the importance rankings to take the previous aspect's place—this effect is borne out with the gradual top-to-bottom, right-to-left shift in the scattergram plots of importance and satisfaction.

Executive Overview



Executive Overview

A

Business Sectors and System Use

In the overall INPUT survey, IBM customers in Europe had a 26% presence in Finance, and a 43% presence in Manufacturing; for IBM SCHWEIZ these figures were 43% for Finance and 24% for Manufacturing.

The difference of business cultures could affect the importance and satisfaction ratings, particularly with respect to system availability and fix times.

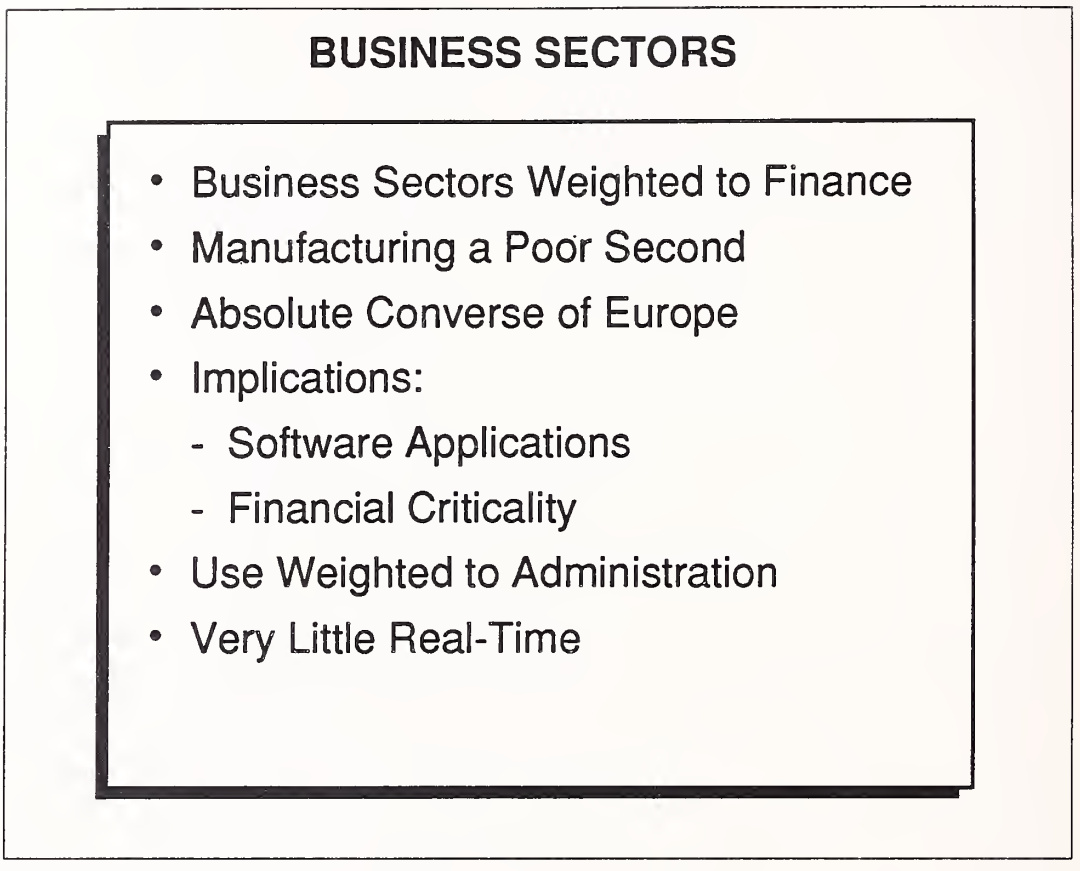
However, when the customers were assessed by the use to which their systems were put, it was found that some 68% of the systems were used for administration—and this is a fairly typical pattern throughout Europe. Hence results between Switzerland and Europe can be compared without too much bias.

Nevertheless, dependant upon the application, financial administration might be more or less time critical than manufacturing and should be taken into account when assessing system criticality.

One way of obtaining enhanced service returns is to build in system criticality, particularly with respect to real-time systems, so that a premium may be charged for enhanced service.

Exhibit III-1 refers.

EXHIBIT III-1



B

Hardware Services

A comparison of the service provided by IBM SCHWEIZ with that provided in the rest of Europe shows little difference in the pattern of satisfaction and importance, but there are other concerns.

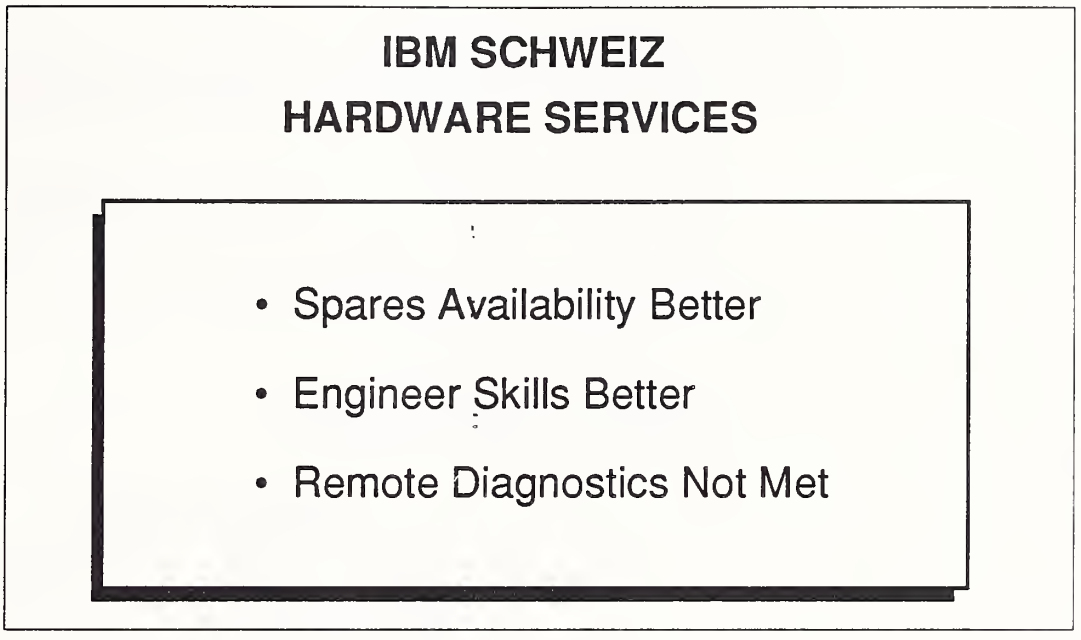
Throughout Europe the four worst performances are in Spares Availability, Engineer Skills, Escalation and Documentation—IBM SCHWEIZ has a better record on Spares and Engineer Skills, but Documentation and Remote Diagnostics pose a problem.

In general, the worst satisfaction index is just below the customer concern level and, apart from Escalation, quickly reaches marginal levels. Overall the performance is exactly equal to that of the sample population of all companies in Europe.

Spares Availability with a satisfaction index of 0.5 compares with 0.8, and Engineer Skills at 0.4 compares with 0.7 in Europe, but Remote Diagnostics at 0.9 demonstrates an unsatisfied requirement.

Exhibit III-2 refers.

EXHIBIT III-2



C

Hardware Satisfaction by Model

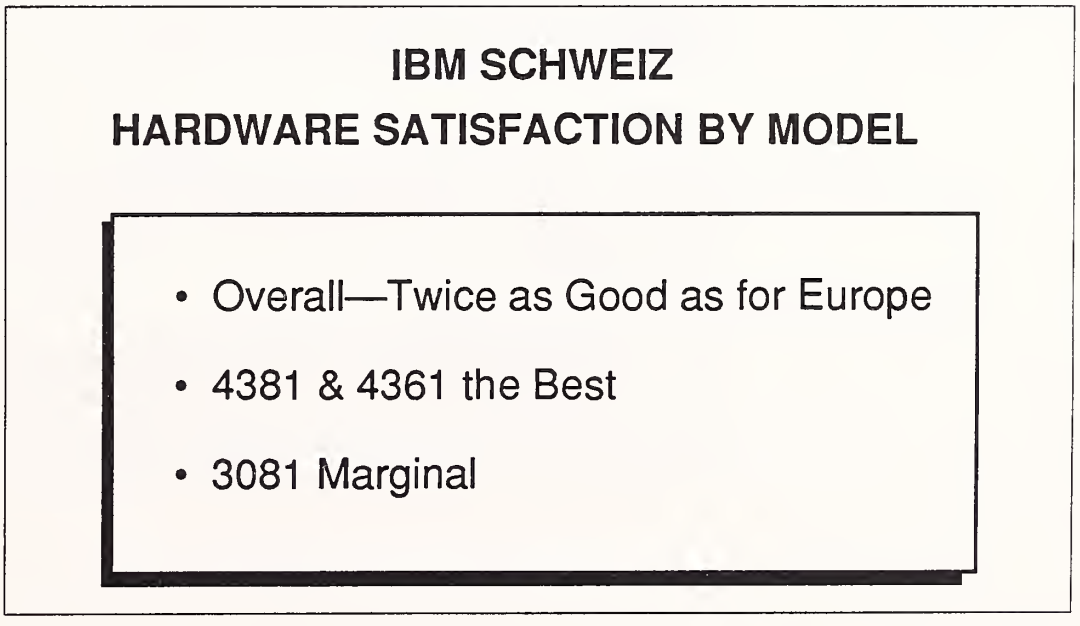
Taking the average across all types of models in Europe, IBM SCHWEIZ customers are twice as satisfied as their European counterparts.

This doubled satisfaction does not apply across all the range, and IBM in Germany has a very good figure for the System 38 as against Switzerland (0.1 to 0.5), but IBM SCHWEIZ has only a marginal performance on the 3081 with a satisfaction index of 0.7.

However, for the 4361 with an SI of (0.3), the customers are well and truly satisfied.

Exhibit III-3 refers.

EXHIBIT III-3



D

Hardware Satisfaction by Use

The major use of systems by customers throughout Europe was in administration and, in this area of use, IBM SCHWEIZ had a particularly good satisfaction index score at 0.2 (compared to 0.9 for IBM in Europe). Due to the small cell size of the customers using the systems for development and real-time applications, the adverse ratings did not unduly affect the overall mean, which was itself quite good.

Exhibit III-4 refers.

EXHIBIT III-4

IBM SCHWEIZ
HARDWARE SATISFACTION BY USE

- Administration Users Well Content
- Development Users Concerned
- Two RT Customers Dissatisfied

E

Software Service Satisfaction

IBM SCHWEIZ has much more scatter in the levels of importance and satisfaction than is the case for Europe as a whole, but the overall satisfaction index is only slightly worse (0.5 to 0.3).

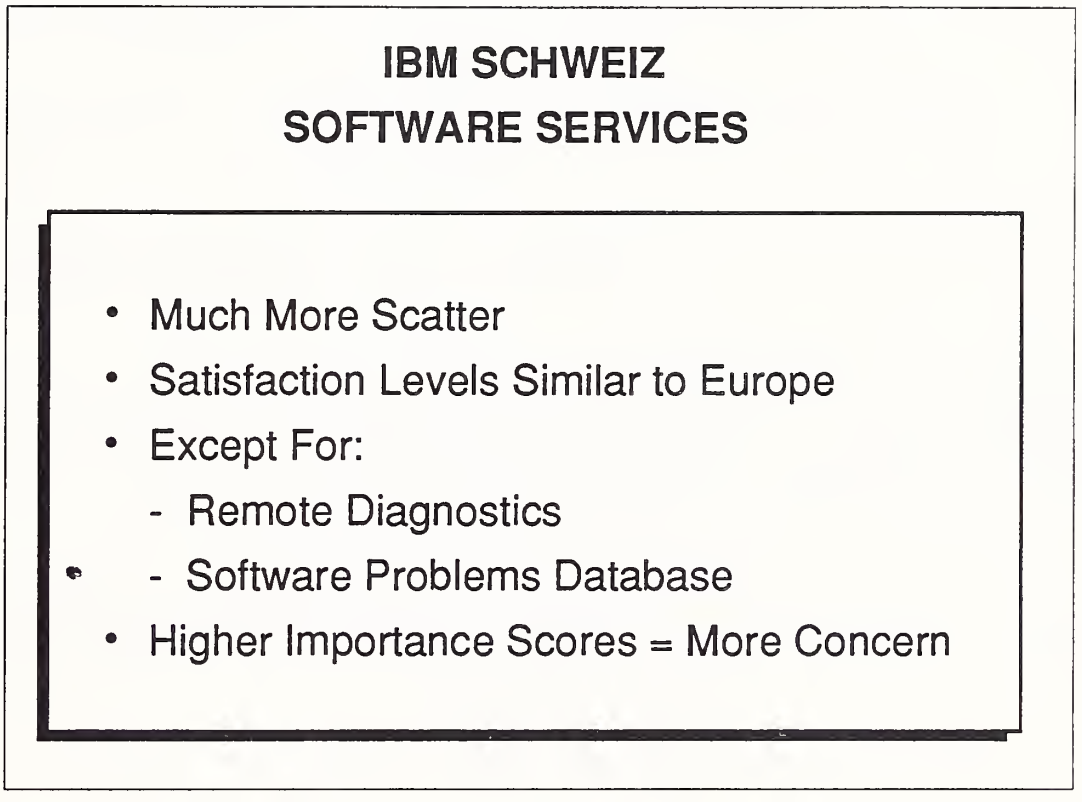
In general, the importance levels are higher, but these levels fall off rapidly in the areas of Remote Diagnostics and Software Problems Database which, with Documentation, are the services with least satisfaction expressed.

It is worth noting that importance ratings tend to decrease as the customer becomes more satisfied with the service being rendered—hence manufacturers must always concentrate on ensuring that the services with the highest scores are properly monitored.

The manufacturer must also ensure that critical services are properly provided despite the customer rating for that service—this is the difference between customer perception and real need.

Exhibit III-5 refers.

EXHIBIT III-5



F

Software Satisfaction by Model

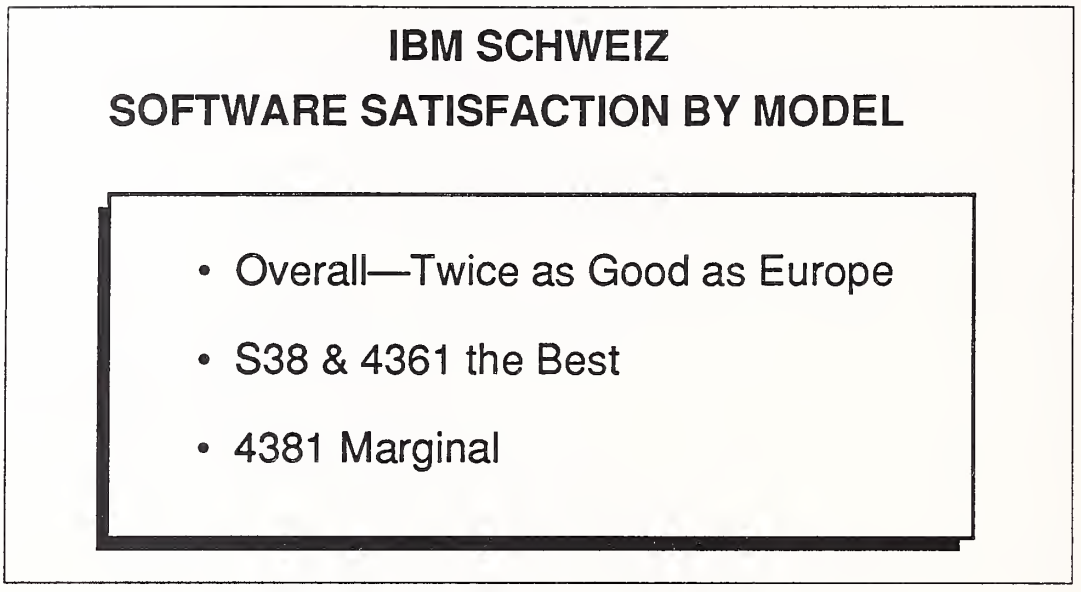
As distinct from the hardware satisfaction, for software IBM SCHWEIZ has a very good satisfaction index (ie. the customer is fully satisfied). The index is better than those for Germany and Europe, at 0.5 and 0.8 respectively.

The 3083 score has been discounted due to the small cell size of three, but those three customers are well satisfied.

However, the 4381 (with the satisfaction index at 1.0 (ie., the concern level)) is marginal and may need attention.

Exhibit III-6 refers.

EXHIBIT III-6



G

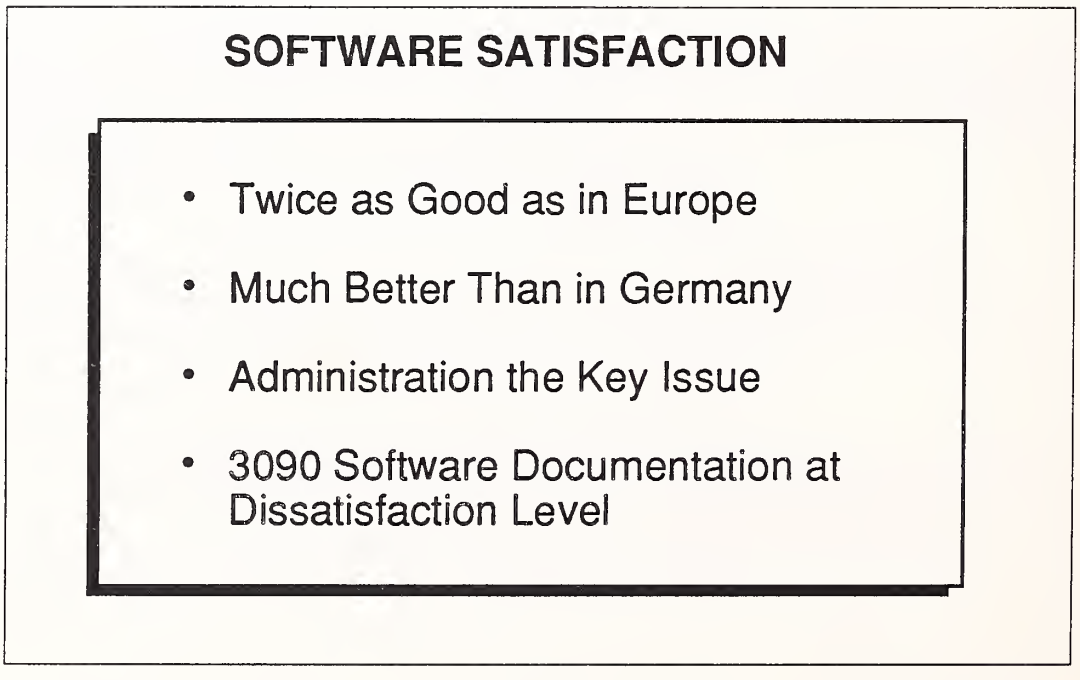
Overall Software Support Satisfaction

With slightly higher importance and satisfaction ratings than in Germany and Europe, IBM SCHWEIZ still achieved a better satisfaction index of 0.4 (compared to 0.7 and 1.0 respectively).

For comments about the effect of having a high percentage of administration system users, reference should be made to the section above on hardware satisfaction.

Exhibit III-7 refers.

EXHIBIT III-7



H

Hardware Fix Times

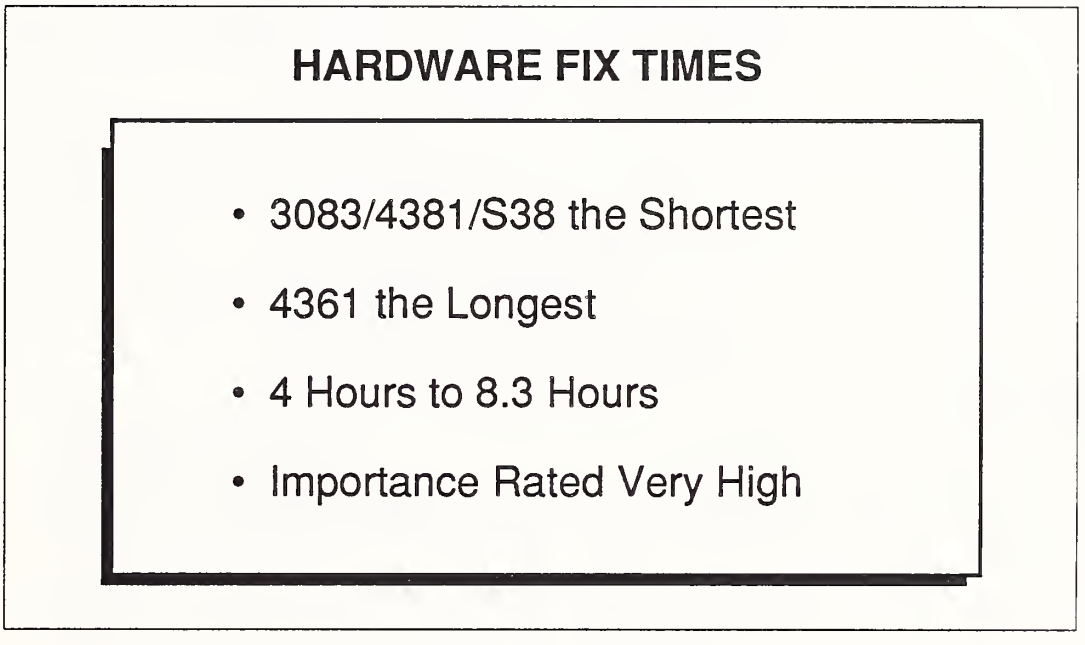
The shortest overall fix time, including response and repair, was recorded against the 3083 (cell size 3). The time was 4 hr, with the 4381 and System 38 very close at 4.2 hr.

The 4361 (cell size 4), however, was over twice as long at 8.3 hr, this time exactly matching the European population average.

The importance ratings for response and repair were higher than the European averages, indicating the criticality of these services to Swiss customers.

Exhibit III-8 refers.

EXHIBIT III-8



I

Software Fix Times

Again, taking the overall fix time to include response and repair (= problem fix), the shortest average time among customers was with the System 38 at 10.8 hr.

At the other end of the scale, the 3083, with a total fix time of 93.5 hr, was a long way above the average European figure of 37 hr.

It should be noted that the response time alone amounted to an average of 42 hr among the three customers involved.

To balance the scales, the response time average for the 4381 was recorded at 3.5 hr, which is much better than the European average.

The importance rating of 8.9 was quite high, but not as high as with hardware fixes. It should be borne in mind that the overall average across all models was twice as good as the European average.

Exhibits III-9 and III-10 refer.

EXHIBIT III-9

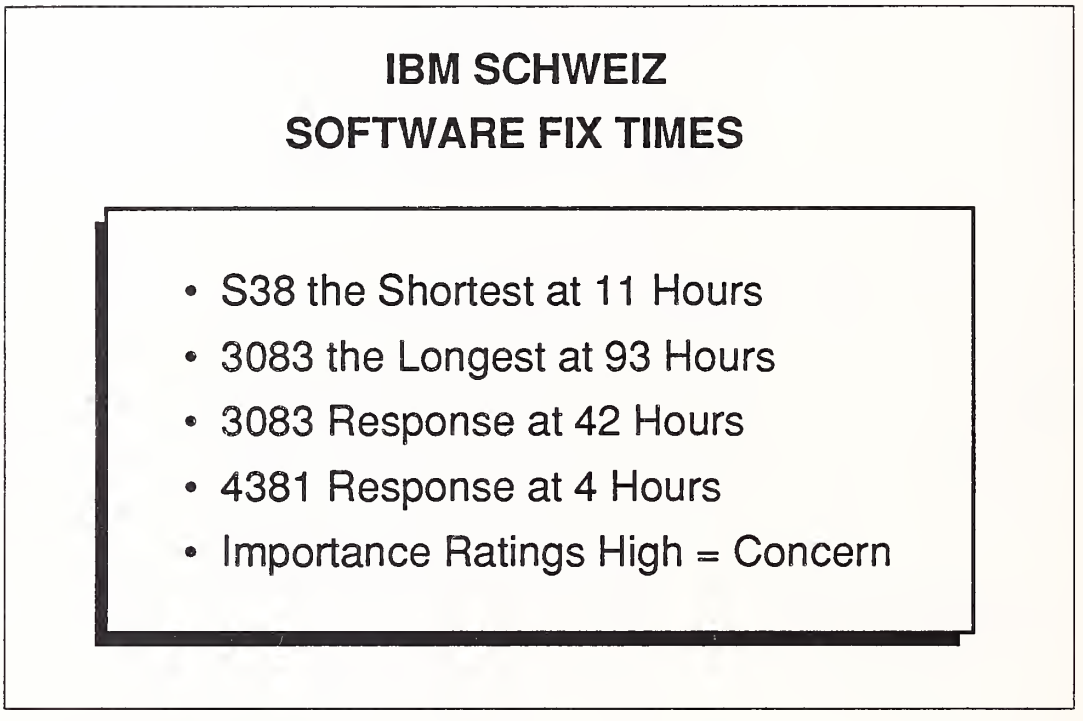
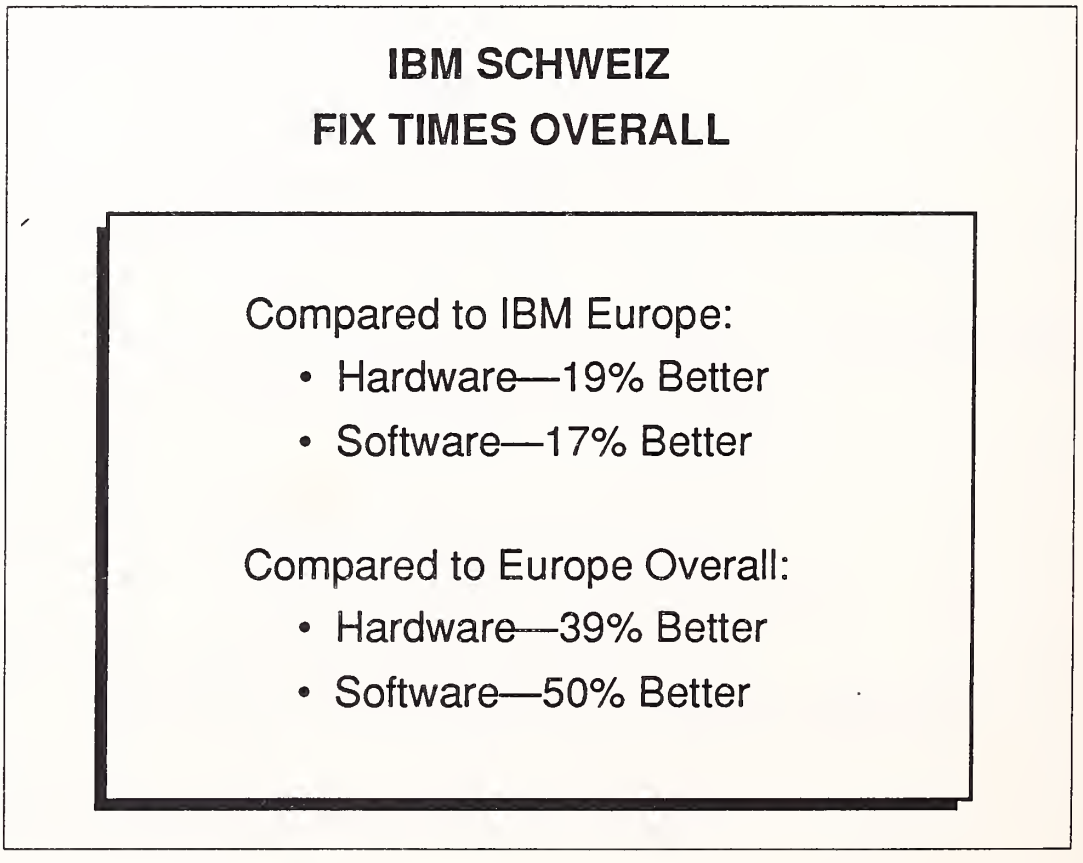


EXHIBIT III-10



J

System Availability

The importance scored for System Availability was very high at 9.6 against a population average of 9.3.

Customers having a 4361 were fully satisfied, and those having a 4381, at a satisfaction index of 0.1, were very nearly so.

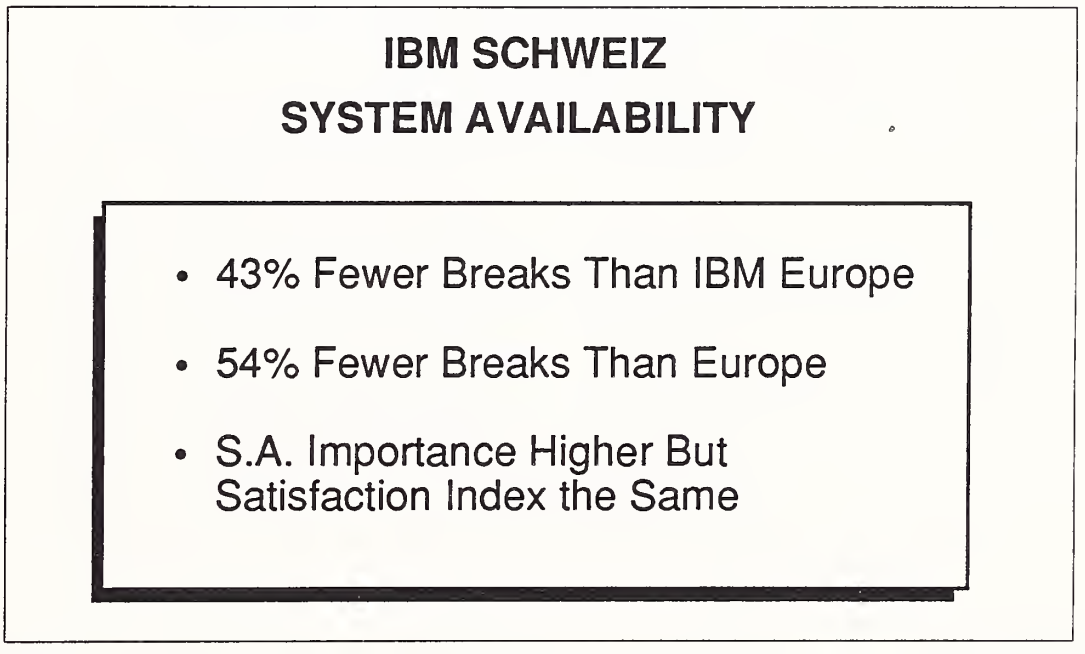
The least satisfied were 3081 and 3083 customers, where the satisfaction index, at 0.6, is creeping up to the concern level.

This scoring appears to be relatively independent of the number of breaks recorded per annum, where the 3090 (2.3 per annum) and the 4381 (1.6 per annum) were highest.

The average number of system breaks per annum (1.3) compares with a 2.3 figure for IBM in Europe and 2.8 for Europe overall.

Exhibit III-11 refers.

EXHIBIT III-11



K

Maintenance Contracts

IBM SCHWEIZ has performed very well in holding some 97% of the full hardware maintenance contracts among its 87 customers. This figure compares with a 90% average for IBM in Europe and a 93% average for Europe overall.

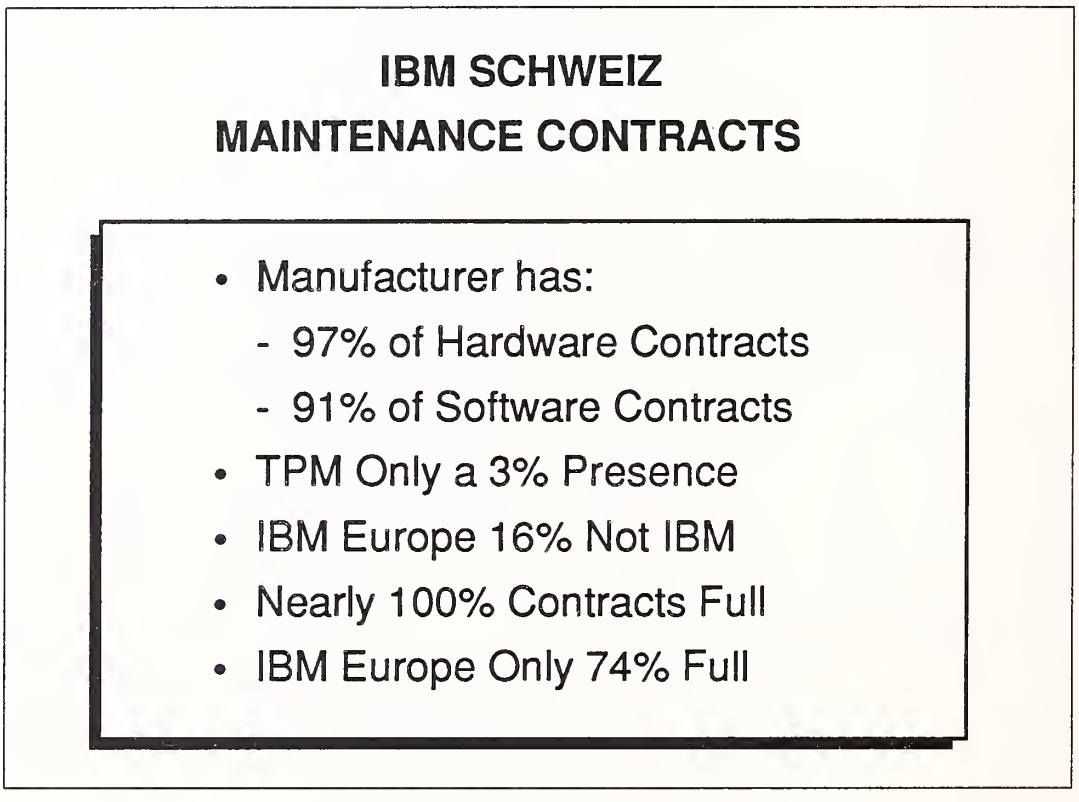
For software support contracts the relative figures are 91% for IBM SCHWEIZ, 88% for IBM in the rest of Europe, and 80% for Europe overall.

One of the reasons for these high figures for IBM SCHWEIZ is that there is only a 3% TPM penetration in IBM's customer base in Switzerland, compared to 13% within IBM's base in Europe as a whole (and an additional 3% with dealers).

Every one of the 87 customers had a full contract, 84 of these being with IBM, whereas the figures for Germany and Europe were 34 to 52 and 203 to 273 respectively.

Exhibit III-12 refers.

EXHIBIT III-12



L

Perception of Performance in Five Years' Time

To the question of what present customers thought the IBM SCHWEIZ performance would be like in five years' time, the majority believed it would be the same as now, as distinct from excellent good or poor.

While it might be argued that the present performance is good or excellent, the latter two descriptions were, in the view of INPUT, not uppermost in the respondents' minds, and 'same as now' ought to be taken as an 'average' rating.

Hence the excellent and good ratings apply to some 23% of the customers, as against some 51% for IBM in the rest of Europe—which is a very clear distinction that needs some investigation as to the causes.

However, taking the percentages added together from 'same as now' up to excellent, then IBM SCHWEIZ has some 59% as against IBM in Europe with 62%—this figure would indicate that, with a little extra effort, IBM SCHWEIZ could improve its figures.

One other note of caution is that the percentages for IBM SCHWEIZ for 'hope they will improve' and 'poor' amount to some 25%, as against the 7% for IBM in the rest of Europe.

Exhibit III-13 refers.

EXHIBIT III-13

IBM SCHWEIZ

FIVE YEARS FORWARD

	SCHWEIZ (Percent)	EUROPE (Percent)
Excellent	10	44
Good	13	7
Same	36	11
Hope Imp.	16	7
Poor	9	-

M

Hardware Maintenance Pricing

Swiss customers apparently attach more importance to hardware pricing than does the average customer in Europe, with both importance and satisfaction ratings higher, but still leaving a satisfaction index at the concern level.

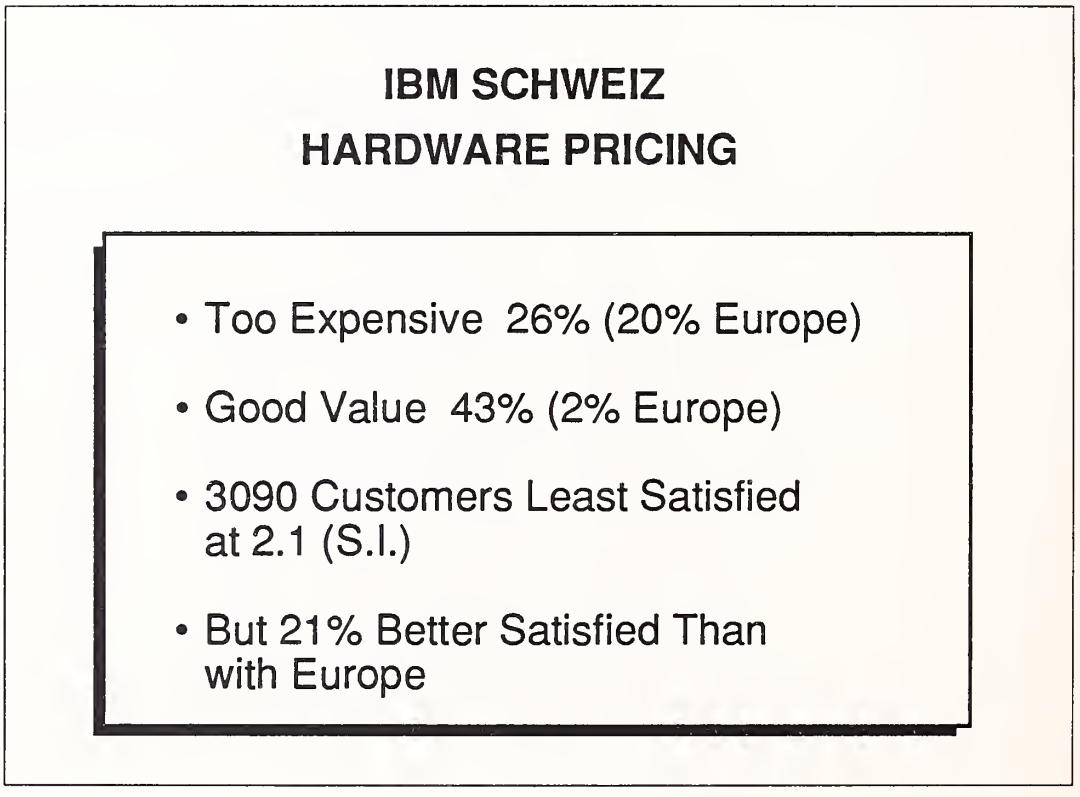
However, customers are very rarely totally satisfied on price, and the index, at 1.1, is still better than the European average at 1.4.

There is a wide difference in satisfaction between the different models, with a good rating (0.3) for the System 38 and a dissatisfaction rating (2.1) for the 3090, which would indicate perhaps that the maintenance package is not matched to customer requirements in some cases, or that relatively poor service performance can affect customers' attitudes to the prices they pay.

However, overall, and matching the 'too expensive' and 'good value' percentages, IBM SCHWEIZ has an arguably better performance in this area than does Europe as a whole, with some 21% better satisfied.

Exhibit III-14 refers.

EXHIBIT III-14



N

Software Support Pricing

As with hardware maintenance the importance and satisfaction ratings are higher than with Europe and, in the case of software support, significantly higher.

The satisfaction index is also significantly better at 0.6 (compared to 0.9 for Europe).

Again there are significant differences in pricing satisfaction between models and, while the 3090 again features a response approaching the concern level, it is the 3081 that produces least satisfaction.

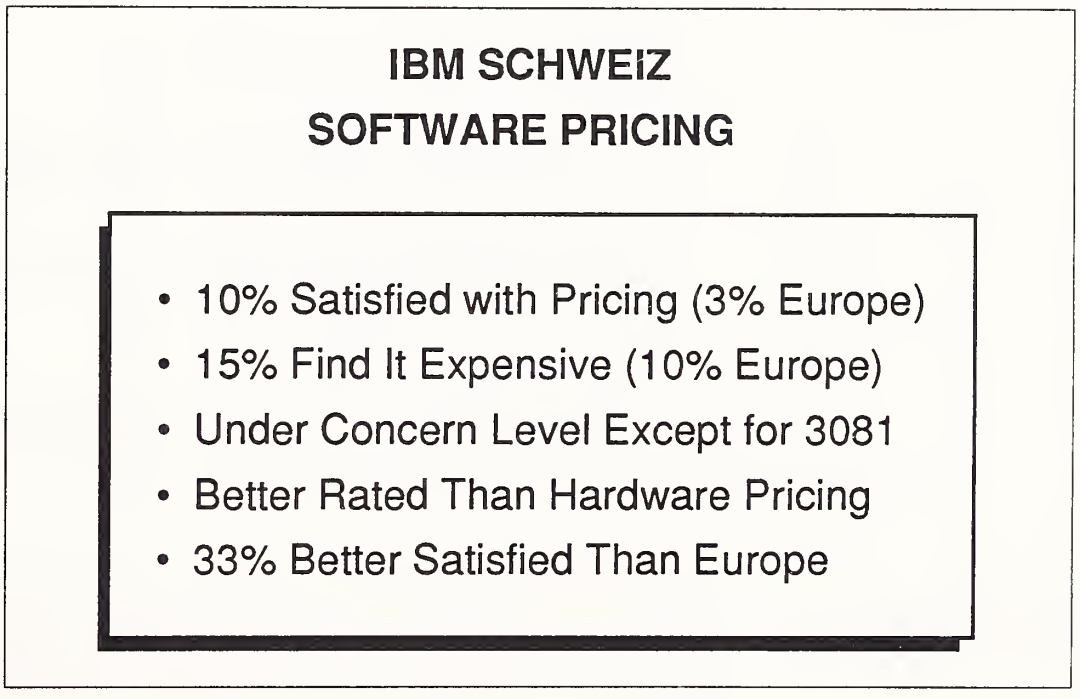
But the System 38 once more gives the best satisfaction with an index of 0.2 (0.3 for hardware maintenance pricing).

However, overall satisfaction with software support pricing is better than with hardware maintenance pricing (0.6 as against 1.1).

With 10% satisfied with the pricing as against 3% in Europe, and 17% finding it too expensive as against 10%, IBM SCHWEIZ is in a reasonable position—however, as this service has been free since April, 1987, there is a clear lack of effective communication with the customer and this aspect will need addressing.

Exhibit III-15 refers.

EXHIBIT III-15



Price Change Expectations

Compared to Europe as a whole, the IBM SCHWEIZ customers who DO expect increases or decreases, expect these to be quite large, for instance 13% for hardware maintenance and 44% for decreases in software support prices.

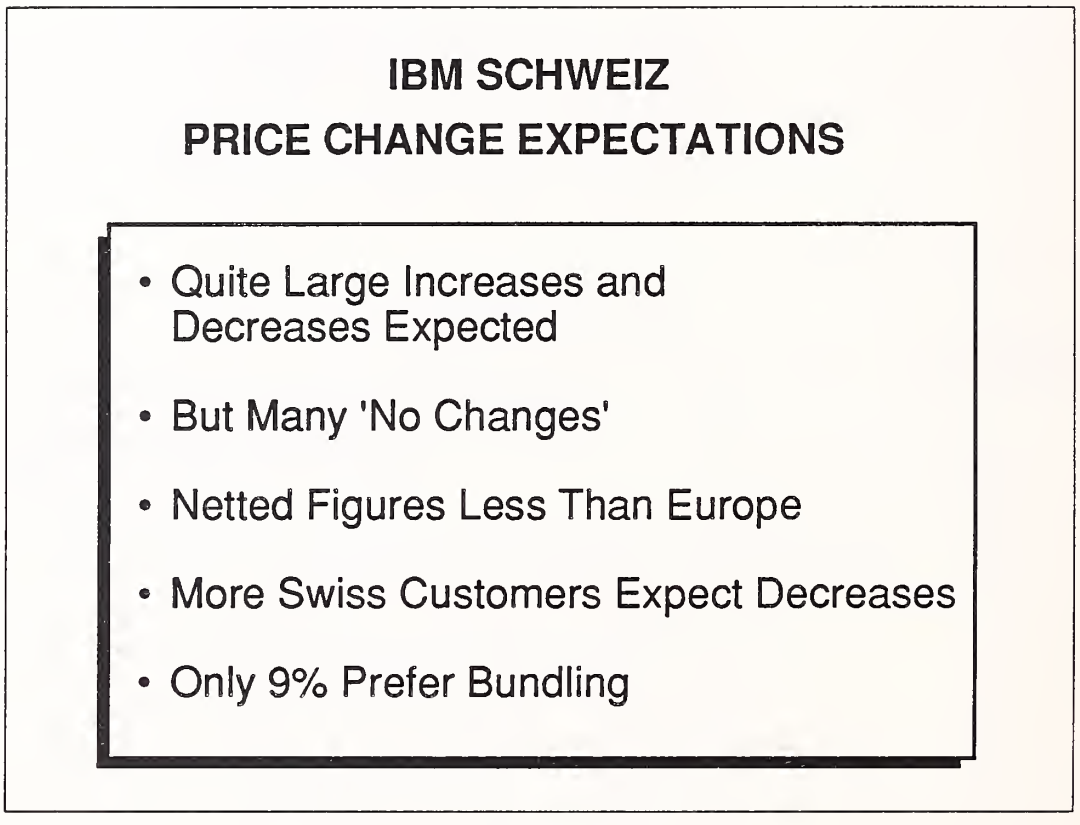
In addition, the relative number who expect decreases is higher than with Europe; hence the netted expectations give a very low expected increase

in hardware maintenance prices at 0.7% (compared to Europe at 2.9%), and a higher figure for software support at 5.1% (compared to 3.2% for Europe).

Only 9% of IBM SCHWEIZ customers stated a preference for bundling, as against 23% for IBM in Europe, whereas 77% preferred individual pricing as against 61%.

Exhibit III-16 refers.

EXHIBIT III-16



P

Best Chances for Selling New Services

Taking interest levels at or near the 7-out-of-10 level and multiplying this level by the percentage of current customers without the stated service gives a ranked table showing four potential services that could be investigated.

Facilities Management is being provided by quite a number of the larger and smaller players in Europe and is regarded as financially viable.

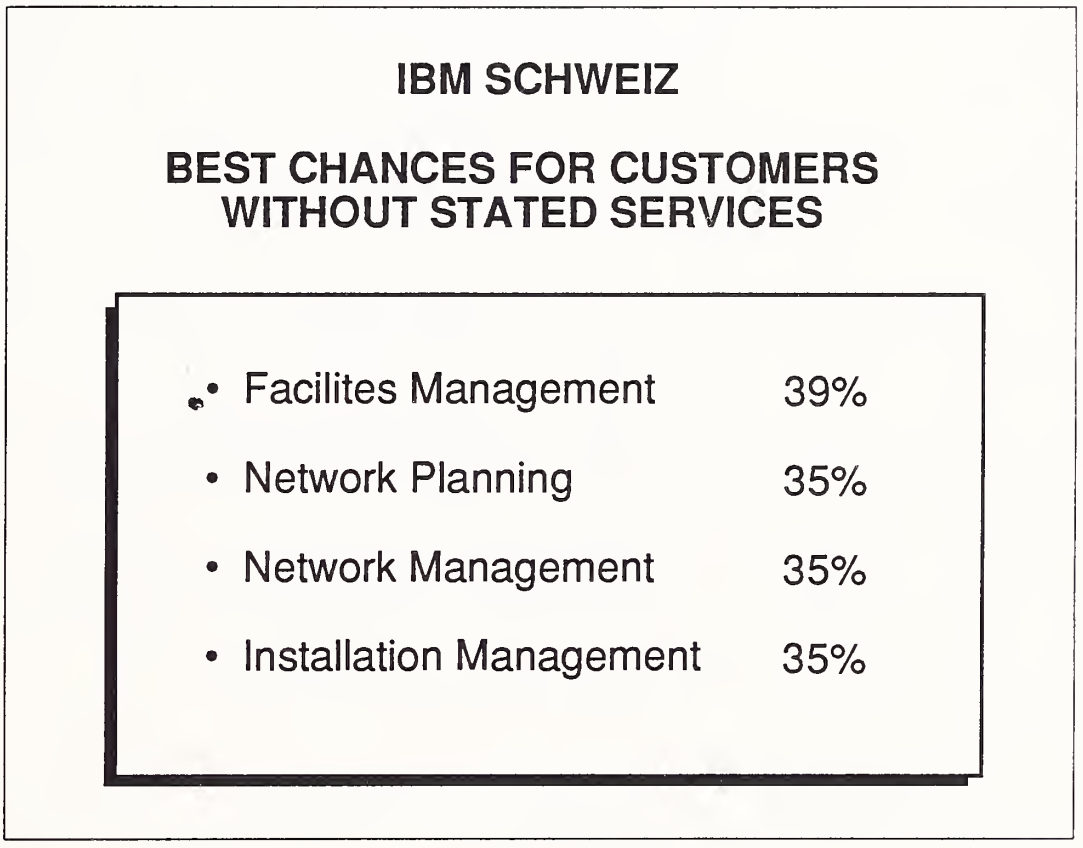
Networking will be a major growth area throughout Europe and the developed continents and so must also be regarded as an opportunity to enlarge the business.

Installation Management should cost little marginal investment and yet provide a useful customer service with connections to facilities management as well.

However, some caution must be exercised in the interpretation of these figures by companies already providing the service. For instance, with training, one can continue to increase sales for an existing service to existing customers.

Exhibit III-17 refers.

EXHIBIT III-17



Q

Opportunities for the Sale of Training Modules

At least 85 out of the 87 respondents were interested in training of one aspect or another.

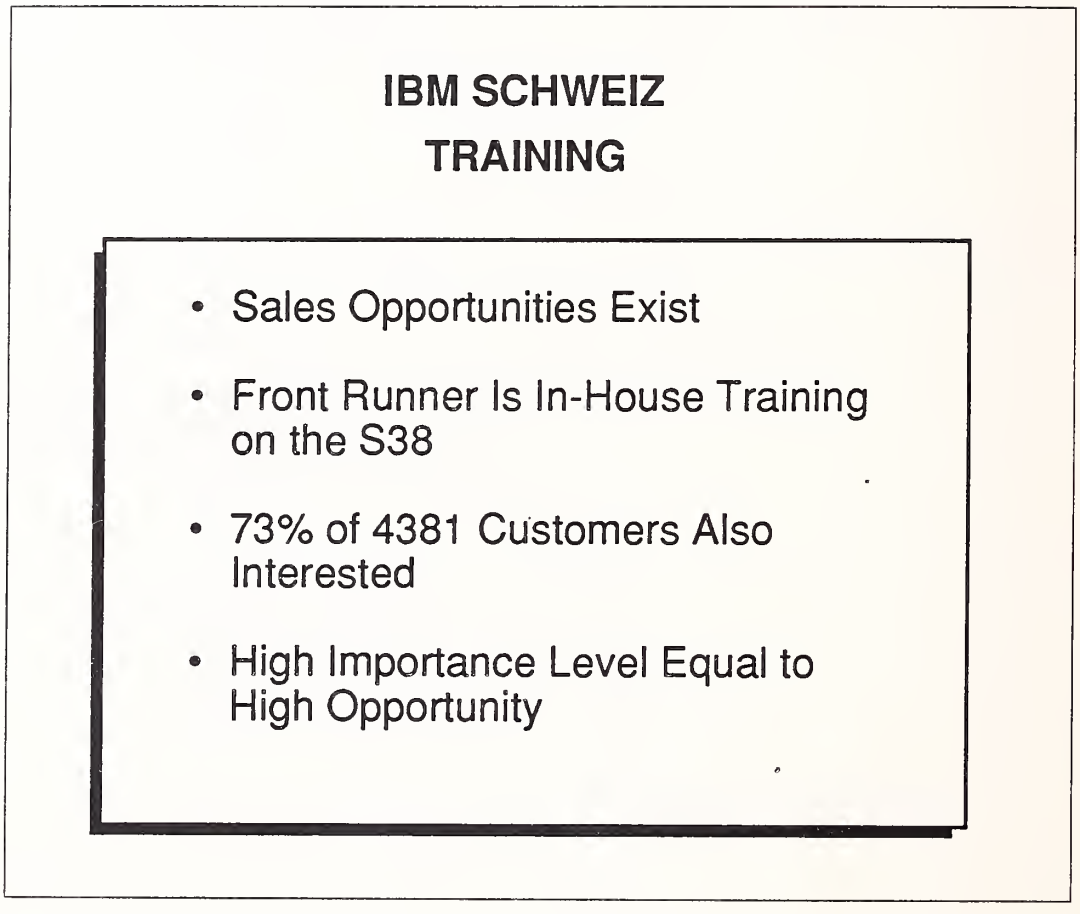
Seventeen of the 26 System 38 customers wanted in-house training on that system which thus provides the best opportunity.

However, some 46% of customers overall wanted training in-house on their own equipment and, given that the expertise must be available within IBM SCHWEIZ, this should require relatively little extra investment to create a sales offering and a revenue opportunity.

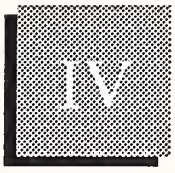
The average interest level at 7.9 is high, thus indicating a good probability of being able to sell a properly tailored product.

Exhibit III-18 refers.

EXHIBIT III-18



Maintenance Services and Support



Maintenance Services and Support

A

Hardware Service

Exhibit IV-1 shows the relative performance of IBM SCHWEIZ against that of Europe for a range of service offerings—on average there is a parity of performance.

Exhibits IV-2 and IV-3 give much the same information in a graphic form that, if reproduced on transparencies, allows superimposition and a quick visual comparison.

Comparison shows that the general level of importance attached to these service aspects is higher in Switzerland than in Europe, perhaps indicating more concern, perhaps a more demanding customer.

EXHIBIT IV-1

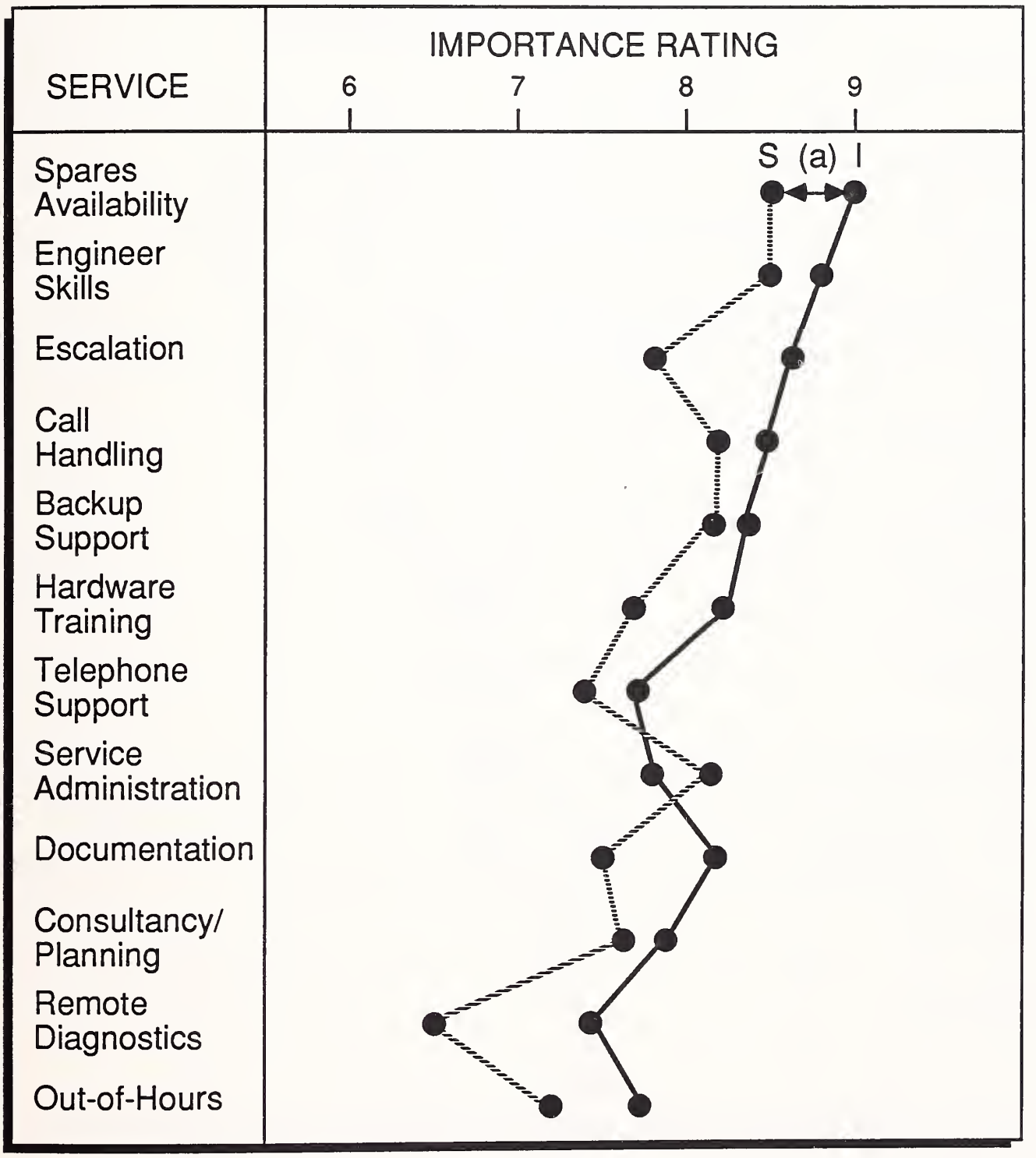
IBM SCHWEIZ
OVERALL SATISFACTION WITH HARDWARE SERVICES

	IBM SCHWEIZ			EUROPE		
	IMP	SAT	IS	IMP	SAT	IS
Quality of Administration	7.8	8.1	(0.3)	7.5	7.4	0.1
HardwareTraining	8.2	7.7	0.5	7.6	7.5	0.1
Spares Availability	9.0	8.5	0.5	8.9	8.1	0.8
Escalation Procedures	8.6	7.9	0.7	8.3	7.6	0.7
Engineer Skills	8.9	8.5	0.4	8.9	8.2	0.7
Remote Diagnostics	7.4	6.5	0.9	6.9	6.9	0.0
Telephone Support	7.7	7.2	0.5	7.6	7.4	0.2
Documentation	8.1	7.5	0.6	7.4	6.7	0.7
Consultancy/Planning	7.9	7.6	0.3	7.1	7.1	0.0
Out-of-Hours	7.7	7.2	0.5	6.7	6.8	(0.1)
Call Handling	8.5	8.3	0.2	8.2	7.8	0.4
Backup Support	8.4	8.2	0.2	8.2	7.8	0.4
Service Co-ordination (In Multivendor)	8.2	7.7	0.5	-	-	-
TOTALS	8.2	7.8	0.4	7.8	7.4	0.4

Question 5: How important is the (stated) factor to your operation, and then (what is) your overall level of satisfaction?

EXHIBIT IV-2

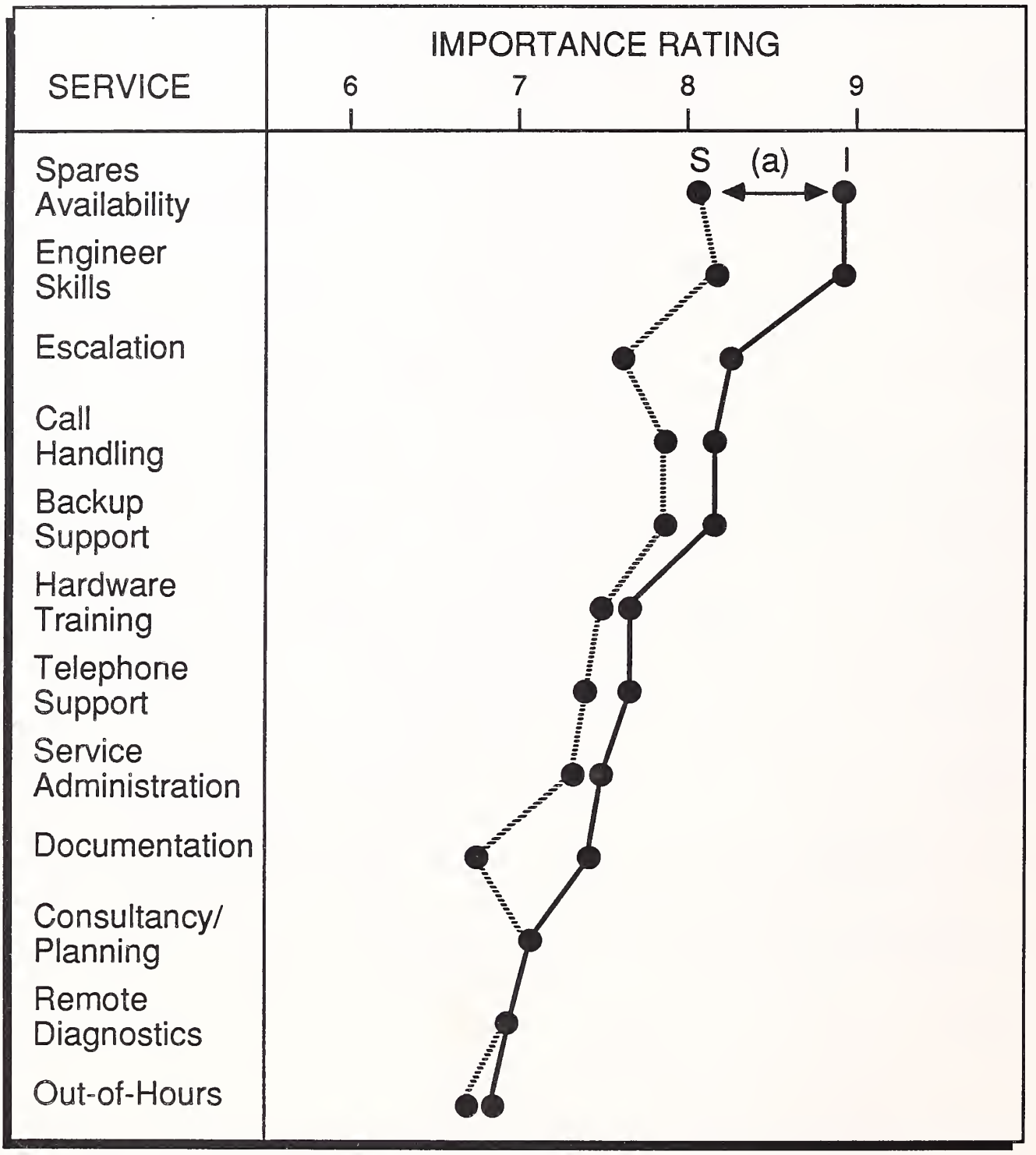
IBM SCHWEIZ
IMPORTANCE OF HARDWARE SERVICES



(a) = Dissatisfaction (Degree Of)
(b) = Satisfaction
Rating 0-10

EXHIBIT IV-3

IMPORTANCE OF HARDWARE SERVICES
EUROPEAN AVERAGES



(a) = Dissatisfaction (Degree Of)
(b) = Satisfaction
Rating 0-10

Sample Size: 1321

However, the satisfaction levels are about equal overall, with some notable exceptions that need investigation.

Exhibits IV-4 through IV-6 give the comparative data for IBM from Switzerland through Germany to Europe overall—as an average IBM SCHWEIZ come out very well, with the 4361, 4381 and 3083 having quite-satisfied customers.

EXHIBIT IV-4

IBM SCHWEIZ

HARDWARE SATISFACTION BY MODEL

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI
38	26	9.7	9.2	0.5
3081	24	9.3	8.6	0.7
3090	13	9.8	9.3	0.5
4381	11	8.8	8.6	0.2
4361	4	9.5	9.8	(0.3)
3083	3	9.3	9.0	0.3
TOTALS/ AVERAGE	87	9.4	9.0	0.4

Question 3a: How important is Hardware Maintenance (overall) to your operation?

Question 3b: How would you rate your level of satisfaction with Hardware Maintenance (overall)?

EXHIBIT IV-5

IBM GERMANY
HARDWARE SATISFACTION BY MODEL

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI
4341	6	9.3	8.3	1.0
4381	12	9.8	9.3	0.5
38	6	9.3	9.2	0.1
ALL TYPES	35	9.6	8.9	0.7

EXHIBIT IV-6

IBM EUROPE
HARDWARE SATISFACTION BY MODEL

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI
3090	15	9.6	8.5	1.1
4341	23	9.4	8.5	0.9
4361	11	8.8	8.4	0.4
4381	86	9.4	8.4	1.0
36	31	9.3	9.0	0.3
38	61	9.2	8.4	0.8
ALL TYPES	273	9.3	8.5	0.8

On particular models, with the range of service offerings, as against the specific satisfaction question above, IBM DEUTSCHLAND has some slightly better figures than IBM SCHWEIZ, and with significantly lower importance and satisfaction levels: this difference may be the 'Swiss' effect, but it might also mean that Germany has a different approach that could also be exploited by Switzerland. See Exhibits IV-7 and IV-8.

EXHIBIT IV-7

IBM SCHWEIZ
SATISFACTION WITH HARDWARE MAINTENANCE

	38			3081			3090		
	IMP	SAT	IS	IMP	SAT	IS	IMP	SAT	IS
Quality of Administration	8.4	8.6	(0.2)	7.7	7.9	(0.2)	6.7	7.5	(0.8)
Operator HW Training	8.4	8.2	0.2	8.0	7.6	0.4	8.2	7.9	0.3
Spares Availability	9.4	8.6	0.8	8.6	8.6	0.0	9.2	8.8	0.4
Escalation Procedures	8.6	8.2	0.4	9.0	8.5	0.5	9.1	9.0	0.1
Engineer Skills	8.5	8.2	0.3	8.9	8.3	0.6	9.6	9.3	0.3
Remote Diagnostics	6.5	5.4	1.1	7.8	7.4	0.4	8.8	8.8	0.0
Telephone Support	8.0	7.5	0.5	7.4	7.4	0.0	8.1	7.1	1.0
Documentation	8.2	7.2	1.0	8.0	7.7	0.3	8.0	7.3	0.7
Planning/Consultancy	7.9	7.5	0.4	7.9	7.8	0.1	8.3	8.1	0.2
Out-of-Hours	6.9	6.3	0.6	8.3	7.4	0.9	9.1	9.1	0.0
Call Handling	8.5	8.3	0.2	8.7	8.4	0.3	8.7	8.7	0.0
Backup Support	8.2	8.1	0.1	8.6	8.3	0.3	8.9	8.6	0.3
Service Co-ordination (In Multivendor)	8.3	8.0	0.3	8.2	8.0	0.2	7.2	6.7	0.5
AVERAGE	8.1	7.7	0.4	8.2	7.9	0.3	8.5	8.2	0.3

Question 5: How important is the (stated) factor to your operation?

EXHIBIT IV-8

IBM GERMANY
SATISFACTION WITH HARDWARE MAINTENANCE

	4341			4381			38		
	IMP	SAT	IS	IMP	SAT	IS	IMP	SAT	IS
Quality of Administration	6.2	6.0	0.0	6.7	7.2	(0.5)	6.9	7.1	(0.2)
Hardware Training	3.5	2.8	0.7	6.1	6.3	(0.2)	5.6	5.6	0.0
Spares Availability	7.2	6.3	0.9	7.3	7.1	0.2	7.7	7.3	0.4
Escalation Procedures	5.5	5.5	0.0	6.3	4.4	1.9	6.0	5.0	1.0
Engineer Skills	8.0	7.8	0.2	9.1	8.3	0.8	8.8	8.3	0.5
Remote Diagnostics	0.8	0.3	0.5	5.1	5.3	(0.2)	4.1	4.1	0.0
Telephone Support	5.0	4.3	0.7	6.3	6.5	(0.2)	6.3	6.2	0.1
Documentation	6.8	7.7	(1.1)	7.6	7.3	0.3	7.7	7.6	0.1
Hardware Services	5.2	5.3	(0.1)	8.2	7.5	0.7	7.3	6.9	0.4
Out-of-Hours	3.3	3.2	0.1	5.8	5.3	0.5	5.1	4.7	0.4
Call Handling	8.3	8.3	0.0	6.3	6.8	(0.5)	7.2	7.0	0.2
Backup Support	5.8	5.8	0.0	6.7	6.7	0.0	6.8	6.8	0.0
AVERAGE	5.5	5.3	0.2	6.8	6.5	0.3	7.4	7.2	0.2

Exhibits IV-9 through IV-11 demonstrate that the major use of computers in the Swiss sample is in administration, and that this is the pattern throughout Europe. There is one very evident difference in the data in that IBM SCHWEIZ outperforms IBM Europe by a factor of two, being particularly better in the area of most common usage—administration.

In addition it should be noted that there is a clear performance difference in Switzerland between administration-utilized systems and the rest, and that there ought to be an investigation into the reasons for this difference before the balance of usage changes, say, to real-time (with an index at the dissatisfaction level).

EXHIBIT IV-9

IBM SCHWEIZ
HARDWARE SATISFACTION BY USE

TYPE OF USE	SAMPLE	IMPORTANCE	SATISFACTION	SI
Administration	68	9.4	9.2	0.2
Other Services	11	9.6	8.7	0.9
Development	5	9.0	7.8	1.2
Real-Time Int.	2	9.5	7.5	2.0
Industrial Automation	1	8.0	10.0	(2.0)
AVERAGE	87	9.4	9.0	0.4

Question 3a: How important is Hardware Maintenance (overall) to your operation?

Question 3b: How would you rate your level of satisfaction with Hardware Maintenance (overall) ?

EXHIBIT IV-10

GERMANY
HARDWARE SATISFACTION BY USE

TYPE OF USE	SAMPLE	IMPORTANCE	SATISFACTION	SI
Administration	183	9.2	8.7	0.5
Development	18	9.0	7.9	1.1
Real-Time Int.	18	9.2	8.1	1.1
Industrial Automation	4	8.3	8.5	(0.2)
AVERAGE	223	9.2	8.6	0.6

EXHIBIT IV-11

IBM EUROPE
HARDWARE SATISFACTION BY USE

TYPE OF USE	SAMPLE	IMPORTANCE	SATISFACTION	SI
Administration	163	9.4	8.5	0.9
Development	14	9.1	8.6	0.5
Real-Time Int.	26	9.2	8.6	0.6
Real-Time Ext.	6	9.5	7.7	1.8
AVERAGE*	210	9.3	8.5	0.8

* One extra cutomer not listed

B

Software Support

As distinct from hardware maintenance, Exhibit IV-12 shows that overall for the complete package of software support offerings, IBM SCHWEIZ is performing marginally worse than Europe as a whole.

EXHIBIT IV-12

IBM SCHWEIZ
OVERALL SATISFACTION
WITH SOFTWARE SUPPORT SERVICES

	IBM SCHWEIZ			EUROPE		
	IMP	SAT	IS	IMP	SAT	IS
Update Provision	8.5	8.2	0.3	7.9	7.6	0.3
Software Installation	8.1	7.9	0.2	7.9	7.7	0.2
Engineer Skills	8.8	8.4	0.4	8.8	8.1	0.7
Telephone Support:						
- Access	8.2	7.8	0.4	8.0	7.5	0.5
- Speed of Fix	8.2	7.8	0.4	8.0	7.3	0.7
Documentation	8.8	7.9	0.9	7.9	6.9	1.0
Planning/Consultancy	7.8	7.7	0.1	7.1	7.0	0.1
Software Training	8.4	7.7	0.7	7.8	7.4	0.4
On-Site Support	8.2	8.0	0.2	7.5	7.3	0.2
Hotline	8.6	8.1	0.5	7.7	7.3	0.4
Software Capacity Tuning	7.8	7.6	0.2	7.6	7.3	0.4
Remote Diagnostics	6.6	5.6	1.0	6.7	6.6	0.1
Software Problems Database	6.8	6.2	0.6	6.5	6.6	(0.1)
AVERAGE	8.1	7.6	0.5	7.6	7.3	0.3

Question 9: How important is the (stated) factor to your operation, and then (what is) your overall level of satisfaction?

Apart from the usual 'bête noire' SW Documentation, the reason for this appears to be the relatively poor ratings for Remote Diagnostics, SW Training and Software Problems Database—all items one feels are well inside IBM technical competence.

A comparison of Exhibits IV-13 and IV-14 shows more scatter for Swiss customers and a very rapid fall-off in satisfaction for Remote Diagnostics and Software Problems Database: as with the hardware plot, the importance and satisfaction ratings are distinctly higher than with Europe and the same comments (as with hardware above) apply. Exhibits IV-15 through IV-17 show the performance differences by model, and IBM SCHWEIZ clearly outperforms IBM in Germany and in Europe overall. The system 38 performance is particularly noteworthy as is, of course, (small cell size notwithstanding) the 3083.

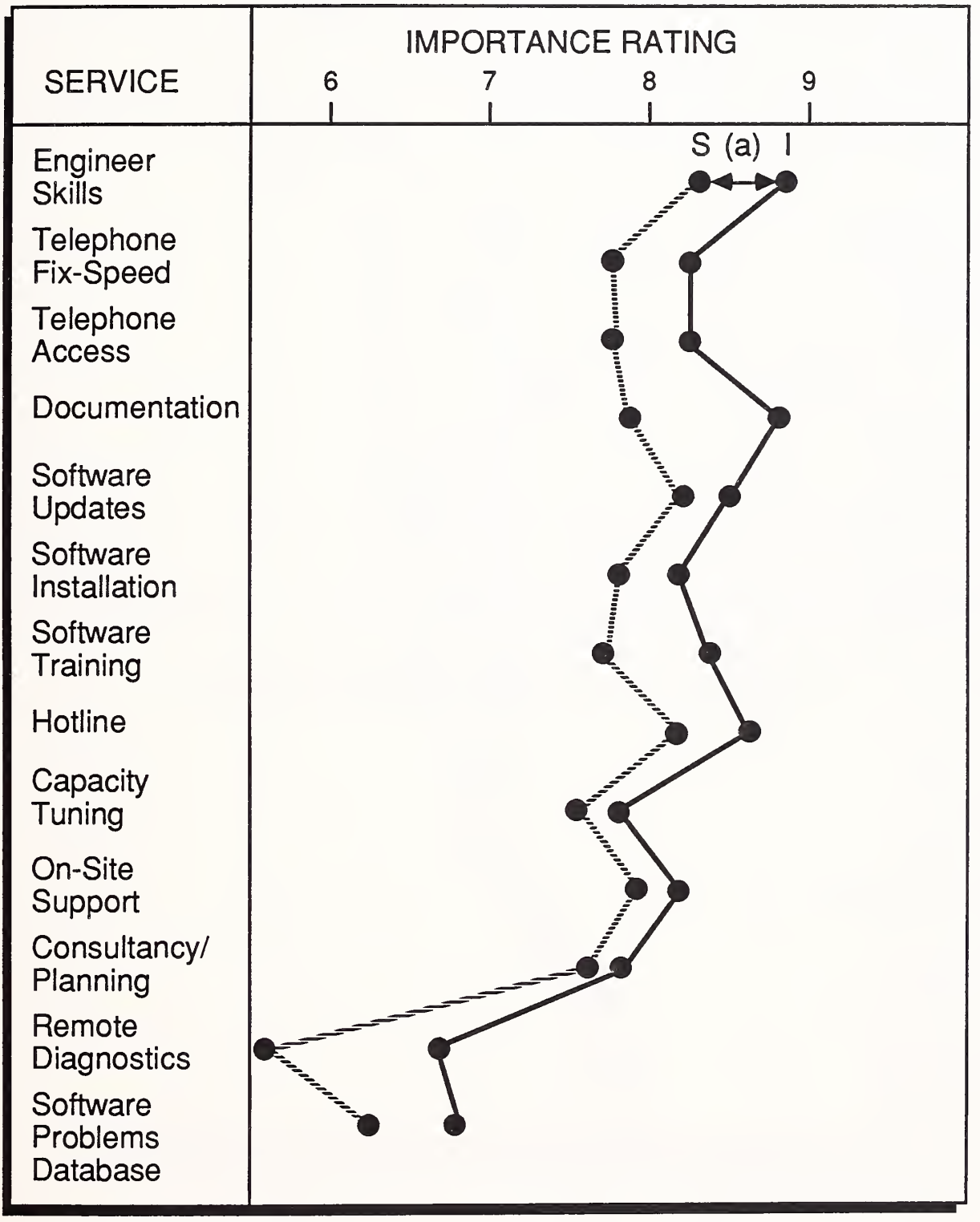
Apart from the bottom line, no full comparison is possible between Exhibits IV-18 and IV-19, but the bad numbers are against the 3090 in Documentation, SW Training and Remote Diagnostics.

The pattern of software support satisfaction by use, shown in Exhibits IV-20 through IV-22, is very similar to that shown for hardware in previous exhibits—IBM SCHWEIZ outperforms IBM Europe by a factor of over two.

However, it should be noted that the satisfaction index is not as good as with hardware service, and this difference may warrant some investigation.

EXHIBIT IV-13

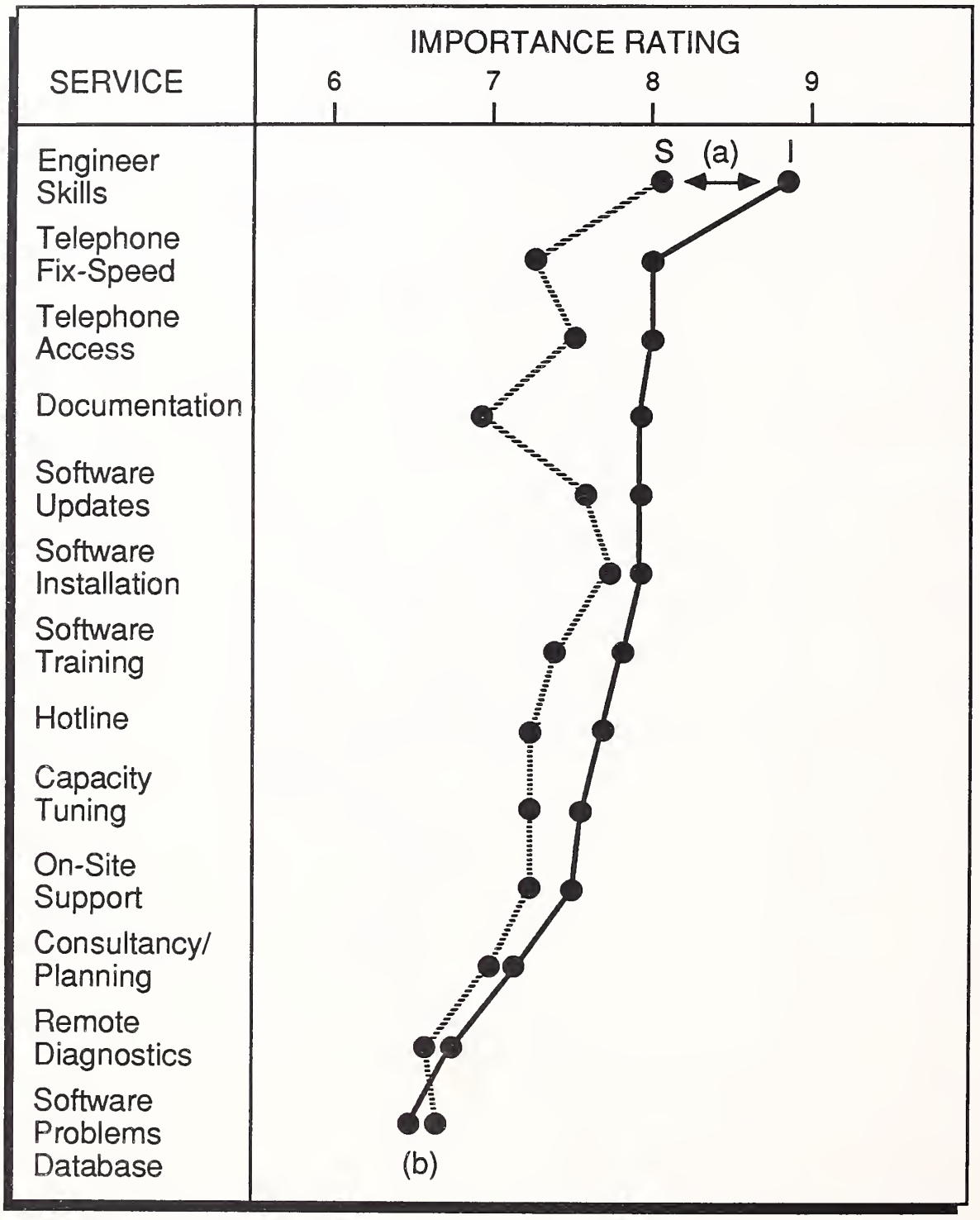
IBM SCHWEIZ
IMPORTANCE OF SOFTWARE SERVICES



(a) = Dissatisfaction (Degree of)
(b) = Satisfaction
Rating 0-10

EXHIBIT IV-14

IMPORTANCE OF SOFTWARE SERVICES
EUROPEAN AVERAGES



(a) = Dissatisfaction (Degree of)
(b) = Satisfaction
Rating 0-10

Sample Size: 1321

EXHIBIT IV-15

IBM SCHWEIZ
SOFTWARE SATISFACTION BY MODEL

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI	TELE SOLU (Percent)
38	26	9.1	9.1	0.0	36
3081	24	9.3	8.4	0.9	57
3090	13	9.6	8.7	0.9	43
4381	11	8.7	7.7	1.0	64
4361	4	9.8	9.5	0.3	28
3083	3	8.0	8.7	(0.7)	58
TOTALS/ AVERAGE	87	9.1	8.7	0.4	46

Question 8a: How important is systems software support to your organisation, and how would you rate your level of satisfaction with system software support?

EXHIBIT IV-16

IBM GERMANY
SOFTWARE SATISFACTION BY MODEL

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI
4341	6	9.0	7.7	1.3
4381	12	8.9	7.8	1.1
38	6	9.2	8.7	0.5
ALL TYPES	35	9.1	8.1	1.0

EXHIBIT IV-17

IBM EUROPE
SOFTWARE SATISFACTION BY MODEL

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI
3090	15	9.2	8.3	0.9
4341	23	8.7	7.2	1.5
4361	11	8.8	7.1	1.7
4381	86	8.8	7.3	1.5
36	31	8.8	8.5	0.3
38	61	8.8	8.0	0.8
ALL TYPES	273	8.8	7.7	1.0

EXHIBIT IV-18

IBM SCHWEIZ
SATISFACTION WITH SOFTWARE SUPPORT SERVICES

	38			3081			3090		
	IMP	SAT	IS	IMP	SAT	IS	IMP	SAT	IS
Update Provision	8.6	8.3	0.3	8.4	8.0	0.4	8.4	8.5	(0.1)
Software Installation	8.0	7.9	0.1	8.0	8.2	(0.2)	8.5	8.1	0.4
Engineer Skills	8.7	8.4	0.3	8.7	8.2	0.5	9.5	9.2	0.3
Telephone Support:									
- Access	8.0	8.2	(0.2)	8.1	7.7	0.4	7.5	7.1	0.4
- Speed of Fix	7.9	8.1	(0.2)	8.6	7.9	0.7	7.6	7.4	0.2
Documentation	8.5	7.8	0.7	8.9	8.1	0.8	9.0	7.3	1.7
Planning/Consultancy	7.8	7.6	0.2	7.7	7.7	0.0	8.2	8.0	0.2
Software Training	7.7	7.5	0.2	8.3	7.6	0.7	9.2	7.9	1.3
On-Site Support	8.1	7.6	0.5	7.9	8.0	(0.1)	9.2	8.5	0.7
Hotline	8.1	7.8	0.3	8.6	8.2	0.4	8.8	8.8	0.0
SW Capacity Tuning	7.8	7.5	0.3	7.5	7.4	0.1	8.2	8.2	0.0
Remote Diagnostics	5.3	4.3	1.0	7.1	6.6	0.5	8.6	7.5	1.1
SW Problems Database	6.9	6.6	0.3	7.0	6.4	0.6	6.9	6.5	0.4
AVERAGE	7.8	7.5	0.3	8.1	7.7	0.4	8.4	7.9	1.1

Question 9: How important is the (stated) factor to your operation, and then (what is) your overall level of satisfaction?

EXHIBIT IV-19

IBM GERMANY
SATISFACTION WITH SOFTWARE SUPPORT SERVICES

	4341			4381			38		
	IMP	SAT	IS	IMP	SAT	IS	IMP	SAT	IS
Update Provision	7.2	7.0	0.2	7.8	6.9	0.9	6.7	7.0	(0.3)
Software Installation	6.5	6.5	0.0	7.0	6.2	0.8	7.7	7.7	0.0
Engineer Skills	5.7	5.7	0.0	7.9	7.5	0.4	8.5	8.3	0.2
Telephone Support:									
- Access	7.7	6.0	1.7	8.1	7.5	0.6	8.2	7.5	0.7
- Speed of Fix	7.2	5.8	1.4	7.8	7.2	0.6	8.0	7.5	0.5
Documentation	7.8	6.0	1.8	7.8	6.3	1.5	8.3	7.5	0.8
Planning/Consultancy	6.5	6.2	0.3	7.1	5.8	1.3	6.3	6.3	0.0
Software Training	7.3	5.3	2.0	7.3	5.8	1.5	8.2	7.7	0.5
On-Site Support	6.7	5.3	1.4	7.7	6.2	1.5	6.8	6.2	0.6
Hotline	7.2	5.7	1.5	6.8	6.2	0.6	7.0	6.8	0.2
SW Capacity Tuning	5.5	5.8	(0.3)	6.4	5.6	0.8	7.2	7.2	0.0
Remote Diagnostics	1.0	0.3	0.7	5.4	3.8	1.6	4.5	4.7	(0.2)
SW Problems Database	3.8	3.7	0.1	3.6	3.1	0.5	5.0	4.8	0.2
AVERAGE	6.2	5.3	0.9	7.0	6.0	1.0	7.1	6.9	0.2

EXHIBIT IV-20

IBM SCHWEIZ
SOFTWARE SATISFACTION BY USE

TYPE OF USE	SAMPLE	IMPORTANCE	SATISFACTION	SI
Administration	68	9.1	8.6	0.5
Other Services	11	9.6	9.1	0.5
Development	5	8.2	8.6	(0.4)
Real-Time Int.	2	8.5	7.5	1.0
Industrial Automation	1	9.0	9.0	0.0
AVERAGE	87	9.1	8.7	0.4

Question 8a: How important is system software support to your operation, and how would you rate your level of satisfaction with system software support?

EXHIBIT IV-21

GERMANY
SOFTWARE SATISFACTION BY USE

TYPE OF USE	SAMPLE	IMPORTANCE	SATISFACTION	SI
Administration	183	9.0	8.4	0.6
Development	18	9.1	8.2	0.9
Real-Time Int.	18	9.1	8.2	0.9
Industrial Automation	4	8.8	8.8	0.0
AVERAGE	223	9.0	8.3	0.7

EXHIBIT IV-22

IBM EUROPE
SOFTWARE SATISFACTION BY USE

TYPE OF USE	SAMPLE	IMPORTANCE	SATISFACTION	SI
Administration	163	8.6	7.7	0.9
Development	14	8.6	7.8	0.8
Real-Time Int.	26	9.1	7.7	1.4
Real-Time Ext.	6	8.8	6.6	2.2
AVERAGE*	210	8.7	7.7	1.0

* One extra cutomer not listed

C

Comparisons by Company across Europe

Exhibit IV-23 gives the intercountry comparisons for overall hardware and software satisfaction, i.e., the single questions are asked for an overall impression, and it can be seen that IBM SCHWEIZ is quite close to the top of the table, for both hardware and software, when ranked by satisfaction index.

Exhibits IV-24 and IV-25 give the intercompany comparisons ranked by order of satisfaction index—the good guys at the top and the bad guys at the bottom.

It is seen that there is a fairly wide disparity between top and bottom, and that IBM is mid-way in both tables, although the rankings of some other companies vary considerably between hardware and software.

It can be seen from these tables that nearly all the ratings are over the significance level of 7, indicating that customers across all companies appear to have a similar view of the importance of the various attributes of service.

EXHIBIT IV-23

HARDWARE AND SOFTWARE SATISFACTION BY COUNTRY

COUNTRY	HW IMP	HW SAT	SI	SW IMP	SW SAT	SI
Denmark	7.0	9.0	(2)	9.3	7.0	2.0
Schweiz	9.4	9.0	0.4	9.1	8.7	0.4
Belgium	8.4	8.0	0.4	8.4	7.5	0.9
Holland	8.6	8.1	0.5	8.3	8.1	0.2
Germany	9.1	8.6	0.5	9.0	8.3	0.7
Italy	9.1	8.3	0.8	9.0	7.0	2.0
UK	8.8	7.7	1.1	8.7	7.6	1.1
France	9.5	8.2	1.3	8.0	8.4	(0.4)
Sweden	9.6	8.1	1.5	8.9	7.1	1.8
Norway	9.6	7.3	2.3	9.8	6.4	3.4

EXHIBIT IV-24

IBM EUROPE
HARDWARE MAINTENANCE SATISFACTION
BY SYSTEM SIZE

COMPANY	LARGE		MEDIUM		SMALL		AVERAGE		
	IMP	SAT	IMP	SAT	IMP	SAT	IMP	SAT	SI
Concurrent	-	-	8.6	8.2	8.1	8.6	8.5	8.3	0.2
Siemans	8.8	8.5	8.9	8.6	-	-	8.8	8.5	0.3
Olivetti	9.3	8.3	8.8	8.8	8.1	8.2	8.8	8.4	0.4
ITL	10.0	8.5	8.8	8.2	8.8	9.5	8.9	8.5	0.4
Philips	9.0	7.0	9.0	8.7	10.0	10.0	9.1	8.4	0.7
IBM	9.4	8.4	9.2	8.6	9.2	9.3	9.3	8.5	0.8
Nixdorf	8.0	6.0	8.9	8.4	9.2	8.0	9.0	8.1	0.9
HP	9.0	8.4	9.2	8.2	8.9	8.2	9.1	8.2	0.9
NCR	9.5	9.0	9.1	8.1	8.9	8.0	9.1	8.1	1.0
DEC	9.3	8.4	9.4	8.3	9.1	8.1	9.3	8.3	1.0
Honeywell Bull	9.6	8.3	9.1	8.3	8.6	7.2	9.2	8.2	1.0
Unisys	9.2	8.1	9.1	8.0	8.9	7.4	9.1	7.9	1.2
ICL	9.4	8.0	9.1	7.8	9.0	7.8	9.2	7.9	1.3
Wang	8.7	8.3	8.8	7.4	9.6	8.0	9.2	7.8	1.4
Average	9.3	8.2	9.1	8.2	9.0	8.1	9.1	8.2	0.9

SI = Satisfaction Index
Sample Size: 1322

Question 3a: How important is hardware maintenance to your operation?

Question 3b: How would you rate your level of satisfaction with hardware maintenance?

EXHIBIT IV-25

IBM EUROPE
SOFTWARE SUPPORT SATISFACTION
BY SYSTEM SIZE

COMPANY	LARGE		MEDIUM		SMALL		AVERAGE		
	IMP	SAT	IMP	SAT	IMP	SAT	IMP	SAT	SI
HP	8.7	7.9	8.6	8.4	8.6	8.1	8.7	8.3	0.4
Nixdorf	10.0	5.0	8.9	8.0	8.1	8.2	8.5	8.0	0.5
Philips	9.0	8.0	8.3	7.7	10.0	10.0	8.6	8.0	0.6
NCR	9.0	8.0	8.7	8.0	8.8	8.1	8.7	8.1	0.6
DEC	8.2	7.7	8.7	8.1	9.0	7.8	8.7	8.0	0.7
Siemens	8.7	8.2	8.8	8.0	-	-	8.8	8.1	0.7
ITL	9.5	8.5	8.2	7.6	9.5	7.8	8.6	7.7	0.9
Honeywell Bull	9.0	7.9	8.7	7.8	7.7	7.3	8.7	7.8	0.9
IBM	8.8	7.5	8.5	7.8	9.1	8.2	8.7	7.7	1.0
Unisys	8.8	7.6	8.7	7.7	8.4	7.6	8.7	7.7	1.0
ICL	9.0	7.8	8.8	7.7	8.3	8.2	8.8	7.8	1.0
Olivetti	8.7	7.6	8.6	7.6	9.4	7.4	8.8	7.6	1.2
Concurrent	-	-	8.6	7.2	9.0	7.4	8.7	7.3	1.4
Wang	8.3	7.3	8.7	7.3	9.3	7.6	9.0	7.4	1.6
Average	8.8	7.7	8.7	7.9	8.7	7.9	8.7	7.8	0.9

SI = Satisfaction Index

Sample Size: 1321

Question 8a: How important is systems software support to your operation, and how would you rate your level of satisfaction with systems software support?

D

The Worst Performance Items

Exhibits IV-26 and IV-27 give comparative figures for the service and support offerings that come out worst in Switzerland and Europe (apart from Remote Diagnostics).

A quick view can be taken by comparing the figures on the bottom line, where it can be seen that IBM SCHWEIZ is better in Spares Availability and HW Engineers Skills.

Against individual models the 3090 and the 3083 have some particularly bad figures, with the SW Documentation below the dissatisfaction level.

EXHIBIT IV-26

IBM SCHWEIZ
SATISFACTION LEVELS IN PROBLEM AREAS

MODEL	SAMPLE	SPARES AVAIL.		ESCA-LATION		HW ENG SKILLS		HW DOCU-MENTATION		SW DOCU-MENTATION	
		IR	SR	IR	SR	IR	SR	IR	SR	IR	SR
38	26	9.4	8.6	8.6	8.2	8.5	8.2	8.2	7.2	8.5	7.8
3081	24	8.6	8.6	9.0	8.5	8.9	8.3	8.0	7.7	8.9	8.1
3090	13	9.2	8.8	9.1	9.0	9.6	9.3	8.0	7.3	9.0	7.3
4381	11	8.3	7.1	7.1	6.5	8.3	7.9	7.6	7.8	8.6	8.1
4361	4	10.0	9.3	9.0	6.5	9.8	9.0	8.0	7.0	9.8	9.0
3083	3	10.0	8.7	9.0	8.0	9.0	9.3	8.3	7.7	8.3	6.7
TOTALS/ AVERAGE	81	9.0	8.5	8.8	8.4	8.8	8.4	8.0	7.4	8.8	7.9

Derived/abstracted from Questions 3 and 9.

EXHIBIT IV-27

IBM EUROPE
SATISFACTION LEVELS IN PROBLEM AREAS

MODEL	SAMPLE	SPARES AVAIL.		ESCA-LATION		HW ENG SKILLS		HW DOCU-MENTATION		SW DOCU-MENTATION	
		IR	SR	IR	SR	IR	SR	IR	SR	IR	SR
38	41	9.1	8.7	8.4	8.4	9.2	8.7	7.9	7.3	8.2	7.2
3081	7	9.3	8.3	8.5	8.0	9.7	8.9	8.1	8.4	9.6	8.1
3090	10	9.5	8.2	8.6	7.4	9.0	9.0	8.4	7.9	8.5	8.0
4381	64	8.9	8.0	8.3	7.6	9.1	8.5	7.6	7.4	8.3	7.3
4361	11	8.8	7.8	8.2	8.2	8.7	8.1	7.1	7.7	8.3	8.1
3083	8	9.0	8.6	8.5	7.9	8.6	8.3	7.0	8.0	8.0	7.5
TOTALS/ AVERAGE	141	9.0	8.2	8.4	7.9	9.1	8.5	7.7	7.5	8.3	7.4

Derived/abstracted from Questions 3 and 5.

E

Breakdowns and Satisfaction with Availability

Exhibit IV-28 shows that the number of breaks per year is quite small and about twice as good as the European mean; the distribution of the breaks between hardware and software originated is similar to that in Europe but not exact (59/41 against 54/46), but there is a wide difference between the S38 at 78/22 and the 3083 at 34/66.

With the importance of systems availability the ratings are high, as with Europe, but the satisfaction index is some 30% better; see Exhibit IV-29. It should be noted that there are companies with a much better index, and IBM SCHWEIZ should not rest 'on its laurels' or it might lose market position.

The fix times for individual models are given in Exhibits IV-30 and IV-31. The averages are 39% shorter for hardware and 50% shorter for software.

EXHIBIT IV-28

IBM SCHWEIZ
BREAKDOWNS PER ANNUM

MODEL	SAMPLE	NUMBER OF BREAKS PER SITE	AREA OF BREAK	
			HW (Percent)	SW (Percent)
38	26	1.5	78	22
3081	24	0.7	49	51
3090	13	2.3	44	56
4381	11	1.6	59	41
4361	4	-	-	-
3083	3	1.0	34	66
TOTALS/ AVERAGE	87	1.3	59	41

Question 3e: How many times per year does your total system fail completely?

Question 3f: On average, what percentage of the system interruptions that you experience are hardware related and what percentage are software related?

Sample Size: 87

EXHIBIT IV-29

IBM SCHWEIZ

SATISFACTION WITH SYSTEMS AVAILABILITY BY MODEL

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI
38	26	9.7	9.4	0.3
3081	24	9.6	9.0	0.6
3090	13	10.0	9.6	0.4
4381	11	9.3	9.2	0.1
4361	4	9.0	9.0	0.0
3083	3	9.3	8.7	0.6
TOTALS/ AVERAGE	87	9.6	9.2	0.4

Question 3c: If we define Systems Availability as the percentage of your normal working hours that the system is operational, how would you rate your satisfaction with that availability?

Question 3d: And how would you rate the importance?

EXHIBIT IV-30

IBM SCHWEIZ
HARDWARE FIX TIMES

MODEL	SAMPLE	RESPONSE HR		REPAIR HR		TOTAL FIX HR	
		ACC	EXP	ACC	EXP	ACC	EXP
38	26	1.5	1.4	3.3	2.8	4.8	4.2
3081	24	2.7	2.5	3.5	2.9	6.2	5.4
3090	13	3.4	3.8	2.0	2.1	5.4	5.9
4381	11	1.5	1.5	1.8	2.7	3.3	4.2
4361	4	1.8	1.3	3.5	7.0	5.3	8.3
3083	3	1.3	1.0	2.3	3.0	3.6	4.0
TOTALS/ AVERAGE	87	2.2	2.1	3.0	3.0	5.2	5.1

Average: Response Rating 9.3
Repair Rating 9.2

Reponse Time is given as the time it takes between reporting a fault, and the arrival of the service engineer.

Question 4a: On average, what response time do you feel is acceptable and what response time do you experience? Please give your answers in working hours, where 8 hours equals one working day. We are still talking about your main system during normal working hours.

EXHIBIT IV-31

IBM SCHWEIZ
SOFTWARE FIX TIMES

MODEL	SAMPLE	RESPONSE HR		FIX TIME HR		TOTAL TIME HR	
		ACC	EXP	ACC	EXP	ACC	EXP
38	26	4.4	4.7	6.1	6.1	10.5	10.8
3081	24	4.7	8.9	7.7	10.7	12.4	19.6
3090	13	9.2	10.4	3.5	4.6	12.7	15.0
4381	11	3.4	3.5	13.0	14.6	16.4	18.1
4361	4	16.8	18.8	19.8	17.3	36.6	36.1
3083	3	14.0	42.0	14.0	51.5	28.0	93.5
Others	6	-	-	-	-	-	-
TOTALS/ AVERAGE	87	5.9	8.3	7.9	10.2	13.8	18.5

Average: Response Rating 8.9
Repair Rating 8.9

Question 8c: For those software problems that cannot be solved by telephone, on average what response time do you find acceptable (i.e., the time taken by a SW specialist to arrive on site), and what time do you actually experience?

Question 8e: If we define 'fix time' as the time taken to identify a 'work around' solution to a software problem, on average what 'fix time' do you find acceptable, and experience?

Sample Size: 87

However, within those figures the 3083 and 4361 software fix times are quite poor: even allowing for the small cell size, these poor figures must mean that at least 8% of the sample is registering a protest.

Another aspect to be considered is that customers tend to expect what the vendor gives them over a long period of time; hence an acceptability of, say, 37 hr for a particular model may NOT be what the customer really wants, and may not be what would be acceptable for the same model in a different application.

Hence IBM SCHWEIZ will need to ensure that its general response and repair times are maintained at a level that will encourage customers, as well as be ahead of market averages—and for particular models, if IBM SCHWEIZ wishes to sell these models vigorously.

F

The Five-Year View

Customers were asked what they believed the performance of the IBM SCHWEIZ maintenance and support operation would be like in five years' time.

Exhibit IV-32 shows the customer views expressed against model number, and the apparent picture is quite reasonable. However, when compared with the IBM Europe figures, which show a 44% excellent rating, there is a clear discrepancy.

Although there may be cultural differences, this is not apparent from the figures for the rest of Europe, and it is the view of INPUT that IBM SCHWEIZ should establish both an explanation for the discrepancy and a plan for improving its image with customers as 'a company for the future'.

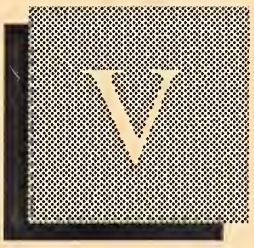
EXHIBIT IV-32

IBM SCHWEIZ

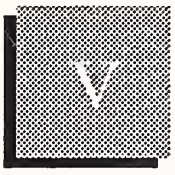
CUSTOMER VIEWS ON SERVICE IN FIVE YEARS' TIME

MODEL	SAMPLE	SAME AS NOW	HOPE FOR IMPROVE.	GOOD RECORD	EXCELLENT	POOR
38	26	12	4	1	5	2
3081	24	4	2	5	1	2
3090	13	6	3	-	1	2
4381	11	7	-	1	2	-
4361	4	1	2	1	-	-
3083	3	-	1	1	-	1
Others	6	1	2	2	-	1
TOTALS/ AVERAGE	87	31	14	11	9	8
PERCENT		36	16	13	10	9

Question 13: How well do you think that your current support vendors will be able to service your requirements in five years' time?



IBM in Europe—
Comparative Figures



IBM in Europe—Comparative Figures

A

Introduction

The following comment is reprinted from the INPUT annual report for the purpose of comparisons, and for the convenience of IBM SCHWEIZ.

B

Business Sectors

The predominant business sector among European IBM customers surveyed was manufacturing, and the proportion, at 43%, very close to that of the sample population at 42%—hence the business 'culture' is roughly the same throughout Europe, although quite different in Switzerland.

C

Hardware and Software Satisfaction

For large systems, excepting hardware Documentation and Call Handling, there is a deterioration in customer satisfaction, and there are at least four items on the software side that are at or above the concern level.

For medium systems, the situation is much the same as with the large installations, except that the Out-of-Hours service has improved, and the software satisfaction levels are marginally better.

For small systems IBM has a much better hardware service performance, with eight of the twelve service aspects showing improvement. On the software side the picture is only marginally better than with the other sizes of installations.

A comparison of a reduced set of service performance figures with those of last year show that, by and large, the hardware satisfaction is three times better, but that the software figures are much better. However, it should be noted that software Documentation and Training are still at a customer concern level.

D

Comparisons with Europe

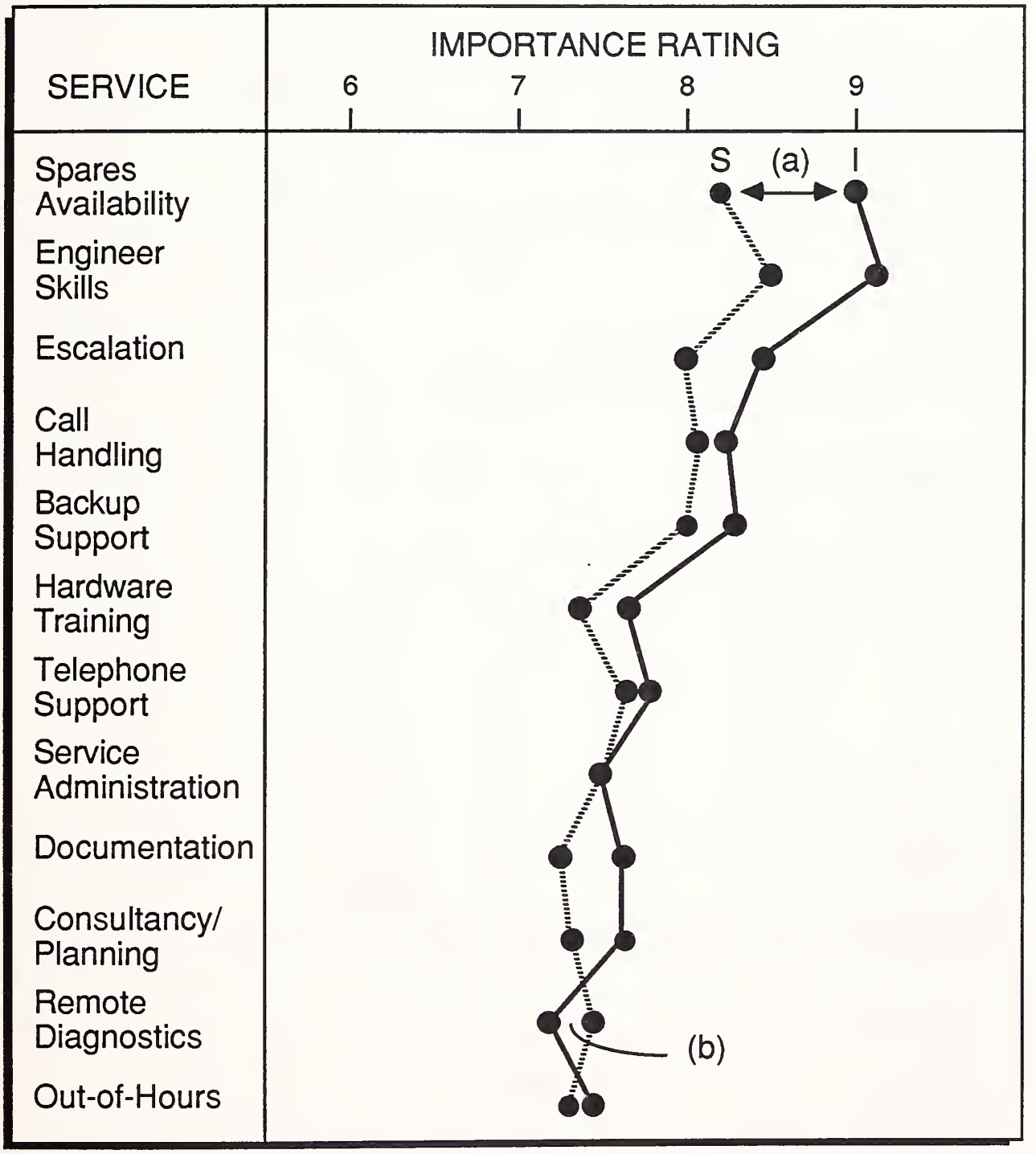
A comparison of the scattergram in Exhibit V-1 with that for the sample population follows the same type of pattern and shows roughly the same level of dissatisfaction. It is interesting that IBM Europe customers have high importance and satisfaction levels for the Remote Diagnostic and Out-of-Hours service compared to other vendors in Europe and a markedly higher satisfaction level than IBM SCHWEIZ.

For software support, the scattergram Exhibit V-2 shows a generally higher level of importance than the sample (unmatched with a corresponding rise in satisfaction), whereas the IBM SCHWEIZ plot shows a closer correspondence overall between importance and satisfaction.

EXHIBIT V-1

IBM EUROPE

IMPORTANCE OF HARDWARE SERVICES



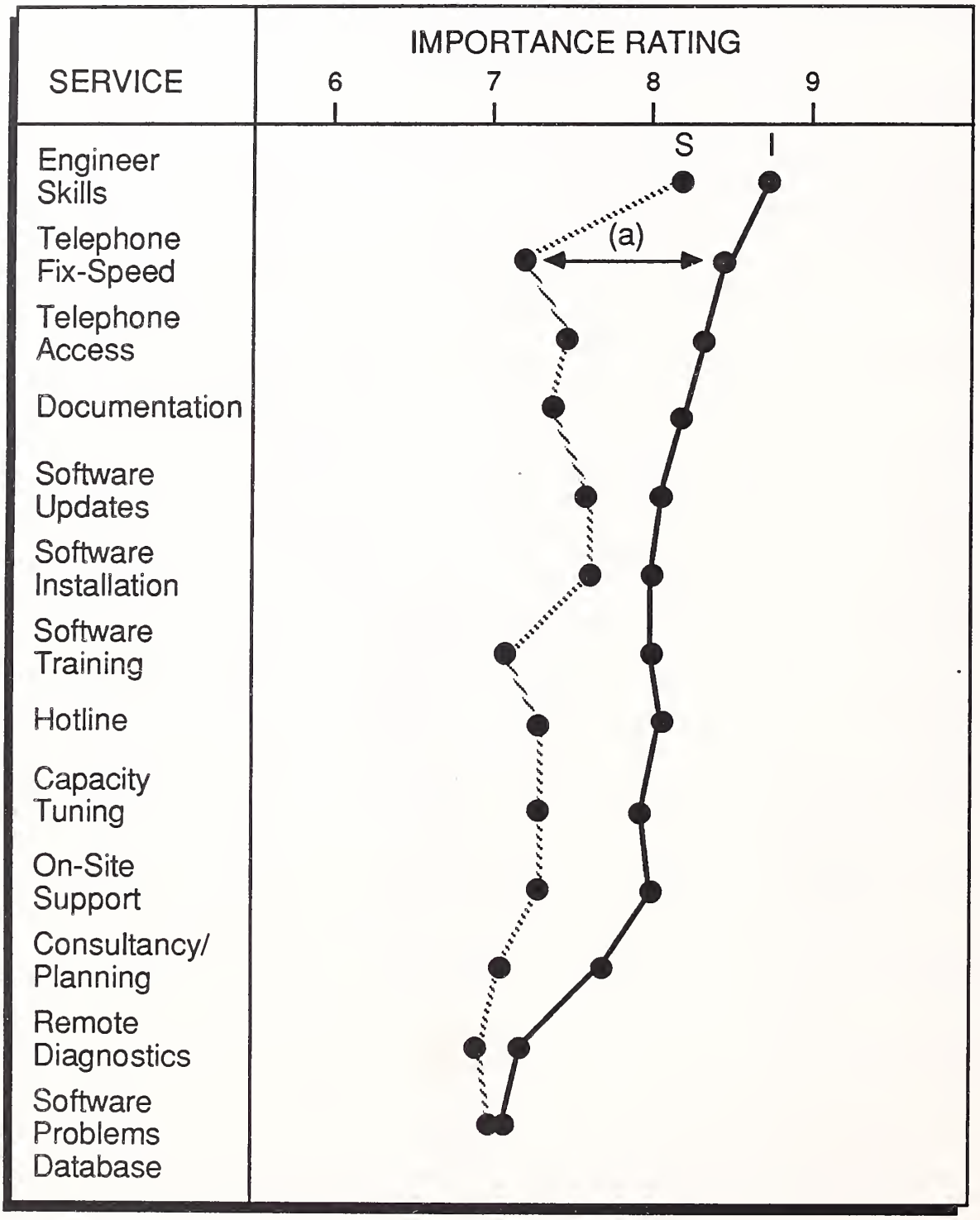
(a) = Dissatisfaction (Degree of)
(b) = Satisfaction
Rating 0-10

Sample Size: 210

EXHIBIT V-2

IBM EUROPE

IMPORTANCE OF SOFTWARE SERVICES



(a) = Dissatisfaction (Degree Of)
Rating 0-10

Sample Size: 210

E

Breaks and Systems Availability

From Exhibit V-3 it is seen that IBM has some 18% fewer breaks than the population sample mean, and with a roughly even number of faults per year irrespective of system size. IBM in Europe, however, has some 56% more breaks than IBM SCHWEIZ.

The proportion of hard to software breaks is opposite to that of the sample population in Europe and reasonably similar to that of IBM SCHWEIZ, which suggests that the effect is technology generated.

In satisfaction with system availability (Exhibit V-4), the index, at 0.4, is some 33% better than that of the population, and matches the Swiss figure exactly.

EXHIBIT V-3

IBM EUROPE

BREAKDOWNS BY SYSTEM SIZE

	BREAKS PA	AREA OF BREAK (Percent)	
		HW	SW
Large	2.4	43	57
Medium	2.2	52	48
Small	1.9	65	35
Average	2.3	47	53
Population	2.8	54	46

EXHIBIT V-4

IBM EUROPE
SATISFACTION WITH SYSTEMS AVAILABILITY

	IMPORTANCE	SATISFACTION	I-S
Large	9.4	8.9	0.5
Medium	9.1	8.9	0.2
Small	9.7	9.5	0.2
Average	9.3	8.9	0.4
Population	9.3	8.7	0.6

Ratings 0-10 (High)

Satisfaction Index (I-S) 0 and negative = Fully Satisfied
1 = Customer Concern
2 = Real Dissatisfaction

Sample Size: 210

F

Hardware Fix Times

A comparison of the hardware response and fix times with those of the sample population (Exhibit V-5) shows a 24% better overall repair time, and a difference between acceptable and experienced times of only 36 min—better than the parent population. However, a similar comparison with last year's times shows a 31% deterioration and a marked increase in unsatisfied expectations.

Comparable figures from IBM SCHWEIZ customers show a 39% better performance than with the European mean, and a difference of only 6 minutes between the acceptable and the experienced fix times.

EXHIBIT V-5

IBM EUROPE
HARDWARE FIX TIMES

	RESPONSE TIMES				REPAIR TIMES				TOTALS (HR)		
	AC	EX	E-A	IMP	AC	EX	E-A	IMP	AC	EX	E-A
Large	2.0	2.3	0.3	9.5	2.6	3.2	0.6	9.4	4.6	5.5	0.9
Medium	2.7	2.8	0.1	9.2	3.9	4.2	0.3	9.2	6.6	7.0	0.4
Small	7.2	7.6	0.4	9.4	5.4	4.7	(0.7)	10.0	12.6	12.3	(0.3)
Average	2.5	2.6	0.1	9.4	3.2	3.7	0.5	9.4	5.7	6.3	0.6
Population	3.4	3.7	0.3	9.1	3.9	4.6	0.7	9.1	7.3	8.3	1.0
Last Year	2.5	2.4	(0.1)	-	2.5	2.4	(0.1)	-	5.0	4.8	(0.2)

AC = Acceptable
EX = Experienced
E-A = EX-AC
IMP = Importance Rating
0 = No Importance
10 = Top Importance

Performance: Better than European Population Means

Sample Size: 210

G

Software Fix Times

Exhibit V-6 gives the same type of picture with the software times, where the average total repair time of some 25 hr is 32% better than the population, but 18% longer than the IBM performance last year.

Comparable figures from IBM SCHWEIZ customers show a 50% better performance than the European mean, and a difference of some 4.7 hr between the acceptable and experienced times (17 hr for Europe as a whole).

EXHIBIT V-6

IBM EUROPE
SOFTWARE FIX TIMES

	RESPONSE TIMES				REPAIR TIMES				TOTALS (HR)		
	AC	EX	E-A	IMP	AC	EX	E-A	IMP	AC	EX	E-A
Large	5.9	10.0	4.1	8.9	7.5	16.3	8.8	9.0	13.4	26.3	12.9
Medium	6.8	11.1	4.3	8.8	8.8	14.1	5.3	8.9	15.6	25.2	9.6
Small	5.1	5.9	0.8	9.6	9.9	10.8	0.9	9.8	15.0	16.7	1.7
Average	6.2	10.1	3.9	8.9	8.1	15.2	7.1	9.0	14.3	25.3	11.0
Population	9.0	17.3	8.3	8.7	11.1	19.7	8.6	8.8	20.1	37.0	16.9
Last Year	5.7	9.3	3.6	-	5.6	12.1	6.5	-	11.3	21.4	10.1

AC = Acceptable
EX = Experienced
E-A = EX-AC
IMP = Importance Rating
0 = No Importance
10 = Top Importance

Performance: Better than European Population Means

Sample Size: 210

H

Maintenance Contracts and Bundling

Exhibits V-7 and V-8 depict which vendor supplies the hard and software support. These Exhibits show that IBM gets roughly the same amount of business as with the sample population but that TPMs have nearly three times the penetration.

There is an unusual picture across the three system sizes, with the large user wanting more bundling than the small user. For most companies this is the other way round; indeed, for IBM SCHWEIZ most users want individual pricing.

EXHIBIT V-7

IBM EUROPE
HARDWARE SERVICE VENDOR BY SYSTEM SIZE

	MANUFAC-TURER (Percent)	DEALER (Percent)	TPM (Percent)	SELF (Percent)	SAMPLE (Percent)
Large	93	2	11	2	124
Medium	88	1	16	1	75
Small	73	18	9	-	11
Average	90	3	13	1	210
Population	93	2	5	1	1322

EXHIBIT V-8

IBM EUROPE
SOFTWARE SERVICE VENDOR BY SYSTEM SIZE

	MANUFAC-TURER (Percent)	SW VENDOR (Percent)	SYSTEMS HOUSE (Percent)	SELF (Percent)	SAMPLE (Percent)
Large	90	6	4	17	124
Medium	87	1	11	15	75
Small	73	9	-	9	11
Average	88	5	6	16	210
Population	80	6	7	20	1322

I

Training

For IBM customers' top training requirements, there is a reasonably close match between the needs of owners of large and medium systems, but the smaller user is much more interested in the software aspect. In the case of IBM customers it is noteworthy that they have a relatively low requirement for training on IBM kits, a factor that does not exist at all for IBM SCHWEIZ customers.

J

Other Services

Only two of the services not yet provided to some customers have importance levels that indicate serious customer interest. All other things being equal, an indication of the best possibility of selling an extra service is found by multiplying the importance rating by the number or percentage of surveyed customers without the service and ranking the results—in the case of IBM, the top items are Disaster Recovery (52/41) and Software Evaluation (30). IBM SCHWEIZ customers have quite different requirements, concentrating mostly on networks.

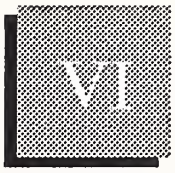
K

Overall Satisfaction Rating

All respondents were asked, in a quite separate question, to give ratings to their overall impression of hard and software support; for IBM in Europe the hardware satisfaction index was marginally better than that of the sample population, and at exactly the same level as last year. On the software side the satisfaction gap was marginally greater than that of the population and marginally better than with IBM's own performance last year. For both hardware and software, IBM SCHWEIZ has significantly better satisfaction figures.

Even though IBM ratings are near the sample mean, some 44% of the IBM respondents felt that the service in five years' time would be excellent, and a total of 62% had no real concern. These figures are quite dissimilar to those of IBM SCHWEIZ, and a determination of the causes and reasons is recommended.

Pricing Considerations



Pricing Considerations

A Hardware Pricing Satisfaction

The overall importance rating, indicating the relative importance that the customer attaches to the vendor's having the 'correct' pricing levels, is much the same as with the average for Europe, but the satisfaction is higher (see Exhibit VI-1).

However, there are three models that have responses indicating concern or even dissatisfaction, namely 4361, 3081 and 3090: in the view of INPUT it is now necessary to establish the reason for the wide difference between the ratings for these machines and the System 38.

Exhibit VI-2 gives the customer comments by model, and it can be seen that those who are satisfied with the pricing amount to some 43%, as against those who are unhappy or have gone elsewhere at 34%. There are wide differences across Europe as to the percentage that find hardware maintenance pricing expensive, from 11% in Belgium to 38% in Holland, the mean being some 20% —hence IBM SCHWEIZ is comparatively high and the level and situation will probably need review or, at the very least, comparison with competitive data within Switzerland.

EXHIBIT VI-1

IBM SCHWEIZ
SATISFACTION WITH HARDWARE PRICING

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI
38	26	7.8	7.5	0.3
3081	24	8.3	6.7	1.6
3090	13	8.5	6.4	2.1
4381	11	8.4	7.2	1.2
4361	4	8.3	6.8	1.5
3083	3	9.0	8.0	1.0
TOTALS/ AVERAGE	87	8.2	7.1	1.1
EUROPEAN AVERAGES		8.0	6.6	1.4

Question 6d: How satisfied are you with your hardware maintenance pricing?

Question 6e: How important is hardware maintenance pricing to you?

EXHIBIT VI-2

IBM SCHWEIZ
COMMENT ON HARDWARE PRICING

MODEL	SAMPLE	EXPENSIVE BUT WORTH IT	TOO EXPENSIVE	GOOD VALUE	TPM	OLD KIT
38	26	4	2	5	2	-
3081	24	9	8	1	1	3
3090	13	3	3	1	1	-
4381	11	5	4	1	1	1
4361	4	3	2	1	1	-
3083	3	2	1	-	1	-
Others	6	3	3	-	-	2
TOTALS/ AVERAGE	87	29	23	9	7	6
PERCENTAGE		33	26	10	8	7

Question 6f: Do you have any comments about hardware maintenance pricing?

B

Software Pricing Satisfaction

There is a similar pattern with software satisfaction, shown in Exhibit VI-3, in that the satisfaction index is well above that of Europe, and with a higher importance level. The satisfaction indices are quite good for all models except the 3081, with the System 38 emerging as the best satisfied (as with hardware).

In commenting on software support pricing, some 15% found it too expensive even though IBM believes it is giving a free service! Details are in Exhibit VI-4. This illustrates very well the difficulty of achieving successful communication with customers, and there is clearly some work to be done in communication strategy, and in pin-pointing the key customer information interfaces.

EXHIBIT VI-3

IBM SCHWEIZ
SATISFACTION WITH SOFTWARE PRICING

MODEL	SAMPLE	IMPORTANCE	SATISFACTION	SI
38	26	8.6	8.4	0.2
3081	24	8.5	7.4	1.1
3090	13	8.4	7.6	0.8
4381	11	8.3	7.6	0.7
4361	4	8.3	7.8	0.5
3083	3	8.7	8.3	0.4
Others	6	-	-	-
TOTALS/ AVERAGE	87	8.5	7.9	0.6
EUROPEAN AVERAGES		8.0	7.1	0.9

Question 10d: How satisfied are you with your systems software support pricing?

Question 10e: How important is systems software support pricing to you?

Again, throughout Europe there was a wide variation in the percentage of customers who found the levels expensive, from 1% in France to 22% in Holland and Denmark, with a mean of 10%, while the figure for IBM SCHWEIZ is some 17%. As with hardware pricing, this perception of expensiveness should be kept under review and monitored against the competition.

EXHIBIT VI-4

IBM SCHWEIZ
COMMENT ON SOFTWARE PRICING

MODEL	SAMPLE	TOO EXPENSIVE	FAIR	IN HOUSE	FREE	IN WITH SOFTWARE
38	26	1	1	5	5	1
3081	24	6	1	3	1	1
3090	13	1	-	-	-	2
4381	11	2	2	-	1	-
4361	4	1	3	-	-	-
3083	3	1	1	-	-	-
Others	6	3	1	1	-	-
TOTALS/ AVERAGE	87	15	9	9	7	4

Question 10f: Do you have any comments about system software support pricing?

C

Pricing Expectations

In Exhibit VI-5 the figures for 1986 represent actual changes, whereas those for 1987 and 1988 represent customer views of what they believe the changes will be.

IBM SCHWEIZ is quite different from Europe in that there is a larger number of customers expecting a decrease or a no change in the hardware service price, whereas for Europe a much higher percentage expects increases. Hence the netted increases are very low in Switzerland at some 0.7%, against a ten-times-higher figure in the rest of Europe.

It is noteworthy that the 4381 customers who expect an increase, expect a much higher increase than with the rest of the models and, for those who expect decreases, that the decrease expected is much less—this situation

EXHIBIT VI-5

IBM SCHWEIZ

PRICE CHANGE EXPECTATIONS HARDWARE MAINTENANCE

MODEL	SAMPLE	1986			1987			1988		
		INC %	DEC %	NC	INC %	DEC %	NC	INC %	DEC %	NC
38	26	10.3	14.7	12	9.0	13.3	15	8.8	13.3	14
3081	24	10.2	9.8	7	5.0	12.0	14	6.5	17.0	13
3090	13	32.3	17.5	4	7.5	17.5	6	5.0	17.5	6
4381	1	14.5	5.0	3	15.5	2.0	5	15.5	0.0	6
4361	4	4.5	0.0	2	5.0	0.0	3	5.0	0.0	3
3083	3	-	-	2	5.0	0.0	2	6.0	0.0	2
TOTALS/ AVERAGE	87	13.6	13.5	32	9.1	14.6	47	9.8	17.4	46
NUMBER OF RESPONDENTS		30.0	15.0	32	21.0	9.0	47	17.0	7.0	46
NET INCREASE EXPECTED (Percent)	SCHZ	2.7			0.7			0.6		
	EUR	5.1			2.9			3.1		

Question 6a: In general, what percentage increase/decrease did you pay on your hardware maintenance prices in 1986 for your main supplier?

Question 6b: In general, what percentage increase/decrease do you expect to pay on your hardware maintenance charges in 1987 and 1988?

does not follow the pattern of expectations in the rest of Europe and, if this is not the result of an IBM (published) strategy, then the reasons for the difference of views should be determined.

Strangely enough, the pattern for price change expectations shown in Exhibit VI-6 is very similar to that of Europe as a whole, with the num-

bers of customers in each category, and the price increase figures, being much closer than those with hardware service. However, in Europe the expected hardware increases are nearly twice the level of those relating to software, whereas in Switzerland the situation is reversed.

EXHIBIT VI-6

IBM SCHWEIZ

PRICE CHANGE EXPECTATIONS SOFTWARE SUPPORT

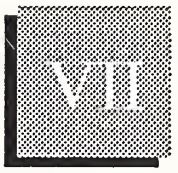
MODEL	SAMPLE	1986			1987			1988		
		INC %	DEC %	NC	INC %	DEC %	NC	INC %	DEC %	NC
38	26	10.0	25.0	20	12.5	0.0	22	15.0	0.0	23
3081	24	10.7	50.0	10	11.4	50.0	11	16.7	50.0	10
3090	13	15.0	0.0	6	15.0	0.0	5	20.0	0.0	6
4381	1	20.5	62.0	2	17.6	0.0	5	15.8	0.0	6
4361	4	21.7	0.0	1	43.3	0.0	1	41.3	0.0	1
3083	3	0.0	0.0	3	12.5	0.0	1	17.5	0.0	1
Others	6	-	-	2	-	-	1	-	-	1
TOTALS/ AVERAGE	87	16.2	44.8	44	17.1	50.0	46	19.9	50.0	48
NUMBER OF RESPONDENTS		23.0	5.0	44	24.0	1.0	46	18.0	1.0	48
NET INCREASE EXPECTED (Percent)	SCHZ	2.1			5.1			4.6		
	EUR	2.8			3.2			2.6		

Question 10a: In general, what percentage increase/decrease did you pay on your systems software support expenditure in 1986 for your main supplier?

Question 10b: In general, what percentage increase/decrease do you expect to pay on your systems software support expenditure in 1987 and 1988?

Sample Size: 87

Service and Support Vendors



Service and Support Vendors

A Maintenance Contracts

In Exhibit VII-1 it can be seen that IBM SCHWEIZ performs very well with only a 3.4% penetration by third-party maintenance companies, as against 5% in Europe overall and 13% for IBM in Europe.

In-house maintenance, although at a slightly higher percentage than in Europe, appears to be additional to the full hardware service contract with IBM, and is therefore only a small problem.

For software support—Exhibit VII-2—IBM SCHWEIZ again picks up the majority of the support contracts with 91%, as against 80% for Europe overall and 88% for IBM in Europe.

In addition, it should be noted that in Exhibit VII-3 each site recorded a full maintenance contract, although one customer had some equipment on a time and material basis. Compared to IBM in Germany (Exhibit VII-4) and in Europe overall (Exhibit VII-5), IBM SCHWEIZ has a far better performance in the take-up of full contracts, and the reasons for this should be determined in order that the situation can be maintained.

Taking 'bundling' to mean the single pricing of all offered maintenance and support services into one 'package', (i.e., NOT meaning incorporated in the system sale price), then only some 9% of IBM SCHWEIZ customers prefer bundling, as against the 77% who prefer the services to be individually priced.

The figures for each model are shown in Exhibit VII-6, but the overall figures compare with 23% and 61% respectively for IBM in Europe, and thus are significantly different. If the figures indicate a trend that has not

yet reached Switzerland, then the strategic and tactical policies will need to be kept under review in this area.

EXHIBIT VII-1

IBM SCHWEIZ
HARDWARE MAINTENANCE VENDOR

MODEL	SAMPLE	MANUFACTURER	TPM	IN-HOUSE
3081	24	24	-	1
38	26	24	2	-
4381	11	11	-	-
3090	13	13	-	1
3083	3	2	1	-
4361	4	4	-	-
Others	6	-	-	-
TOTALS/ AVERAGE	87	84	3	2

Question 1h: Who services the equipment?

EXHIBIT VII-1

IBM SCHWEIZ
SOFTWARE SUPPORT VENDOR

MODEL	SAMPLE	MANUFAC-TURER	IN-HOUSE	SW VENDOR	SYSTEMS HOUSE	OTHER
38	26	23	6	1	-	-
3081	24	21	8	2	1	1
3090	13	13	1	-	-	-
4381	11	10	1	-	-	-
4361	4	4	1	1	-	-
3083	3	2	1	-	-	1
Others	6	6	1	-	-	-
TOTALS/ AVERAGE	87	79	19	4	1	2

Question 7: Who supports the system software on this system?

EXHIBIT VII-3

IBM SCHWEIZ
TYPE OF MAINTENANCE CONTRACT BY MODEL

MODEL	SAMPLE	FULL CONTRACT	T&M
38	26	26	-
3081	24	24	1
3090	13	13	-
4381	11	11	-
4361	4	4	-
3083	3	3	-
Others	6	6	-
TOTALS/ AVERAGE	87	87	1

*No Warranty Declared

Question 1i: What type of hardware maintenance arrangements do you have?

EXHIBIT VII-4

IBM GERMANY
TYPE OF MAINTENANCE CONTRACT BY MODEL

MODEL	SAMPLE	FULL CONTRACT	WARRANTY	T&M
4341	8	6	-	-
4381	22	12	-	-
38	6	6	-	-
ALL TYPES	52	34	-	1

EXHIBIT VII-5

IBM EUROPE
TYPE OF MAINTENANCE CONTRACT BY MODEL

MODEL	SAMPLE	FULL CONTRACT	WARRANTY	T&M
4381	86	63	3	2
38	61	41	-	-
36	31	26	1	1
4341	23	17	-	2
ALL TYPES	273	203	5	8

EXHIBIT VII-6

IBM SCHWEIZ
BUNDLING

MODEL	SAMPLE	INDIVIDUAL	BUNDLED	DK
38	26	22	2	2
3081	24	18	2	4
3090	13	9	3	1
4381	11	8	-	3
4361	4	3	-	1
3083	3	2	1	-
Others	6	5	-	1
TOTALS/ AVERAGE	87	67	8	12

Question 12: Would you in general prefer each of these services to be individually priced or would you prefer to have a totally bundled service offering?

Sample Size: 87

B

Third-Party Maintenance (TPM)

If efficiency and convenience are taken together as reasons for using a TPM in Europe, then these outweigh cost quite significantly. Although the cell size of the sampled customers using TPM in Switzerland is very small (Exhibit VII-7), the indications are that cost may be the major reason here.

Exhibit VII-8 shows the reasons given for NOT using TPMs, and it can be readily seen that IBM SCHWEIZ is in a very good position with respect to customer 'thinking'. As against the 3% TPM penetration in Switzerland, the average penetration on mainframes and minis in Europe is of the order of 6%. Figures for individual models for IBM in Germany and Europe are given in Exhibits VII-9 and VII-10.

EXHIBIT VII-7

IBM SCHWEIZ
REASON FOR USING TPM

COST	2 OUT OF THE 3

Question 2a: Why do you use a TPM company?

EXHIBIT VII-8

IBM SCHWEIZ
REASONS FOR NOT USING TPM

Satisfied with Manufacturer	71	54%
Manufacturer Has an Advantage	41	31%
Contract with Manufacturer	10	8%
Considered but Rejected	6	5%
No Knowledge of TPMs	2	1%
Fear Manufacturer Reaction	2	1%

Question 2b: Why do you NOT use a TPM company?

EXHIBIT VII-9

IBM GERMANY

MAINTENANCE PENETRATION BY MODEL

MODEL	MANU-FACTURER	DEALER	TPM	SELF	NOT MAN'FCT (Percent)
4341	6	-	-	-	-
4381	12	-	-	-	-
S38	6	-	-	-	-
ALL TYPES	34	-	2	-	6

EXHIBIT VII-10

IBM EUROPE

MAINTENANCE PENETRATION BY MODEL

MODEL	MANU-FACTURER	DEALER	TPM	SELF	NOT MAN'FCT (Percent)
4381	62	1	3	1	7
38	38	1	6	1	17
36	22	0	6	0	21
4341	16	0	4	0	20
4361	10	1	1	1	23
TOTAL	148	3	20	3	15
ALL TYPES	189	6	27	3	16

C

Personal Computer Contracts

In Switzerland the balance between dealer and manufacturer with regard to the maintenance of personal computers is practically opposite to that in Europe (see Exhibit VII-11).

However, the TPM penetration at 9% is less, and this is one major way that the TPM company gets 'on to site' and begins to pick up additional contracts.

Bearing in mind the increasing use of micros 'ported' into mainframes and minis, it would pay IBM to ensure that, wherever possible, IBM controls the source of micro maintenance on any of its sites, to further ensure that outside maintenance does not become a significant competitor on those sites.

EXHIBIT VII-11

PERSONAL COMPUTER CONTRACTS

SCHWEIZ

UNITS	DEALER	MANUFACTURER	SELF	TPM	OTHER
3485	55	39	19	11	2
Percentage	44	31	15	9	1

Question 14a: Do you have any PCs—desktop/business personal microcomputers?

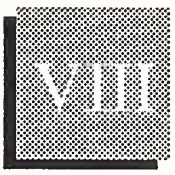
Question 14c: Who services this equipment?

EUROPE

UNITS	DEALER	MANUFACTURER	SELF	TPM
26312	611	749	160	219
Percentage	35	43	9	13

VIII

Requirements for Extra Services



Requirements for Extra Services

A

Level of Interest in Other Services

In general the significance level of the interest rating is about 7; however, the number of customers expressing an interest determines how likely a given service is to be 'saleable' in a reasonable quantity.

Hence, in Exhibit VIII-1, the number of customers without the stated service is multiplied by the interest level, divided by 10, and expressed as a percentage (best) probability in the final column—this would be the normal method used for Decision Tree (morphological) analysis.

The highest figures are then ranked to give the best probability of setting up a saleable service, but this probability does need evaluation against the cost of setting up and providing such a service.

In the Exhibit the best chance would appear to be in the provision of Facilities Management, but closely followed by two network services.

EXHIBIT VIII-1

IBM SCHWEIZ
LEVEL OF INTEREST IN OTHER SERVICES

SERVICE	CUSTOMERS WITHOUT (Percent) (A)	INTEREST LEVEL (B)	D.T. (A) X (B) / 10
Configuration Planning	14	7.2	10
Capacity Planning	11	7.1	8
Environmental Planning	22	6.3	14
Software Evaluation	39	6.8	27
Training	11	7.9	9
Consultancy	25	7.5	19
Network Planning	48	7.2	35
Network Management	48	7.2	35
Disaster Recovery	36	8.2	30
Media Services	7	7.0	5
Facilities Management	59	6.6	39
Problems Management	34	7.7	26
New Installations—Turnkey	46	7.1	33
Movement of Installations	51	6.8	35
Other	97	10.0	-

Interest (Importance) Rating 0-10

D.T. Rating 0-100

Question 11: Which of the following services do you have?

Question 11c: What is your level of interest in these services?

B

Training

As will have been noticed from the last Exhibit, training has a high interest/importance level at 7.9 and, among all the 87 sampled, the biggest number (40) wanted in-house training of some kind or other. Training is an area where INPUT will be surveying the requirements, throughout Europe, during the next year.

Assuming that in-house training could well include the next items in Exhibit VIII-2, then nearly all the extra training could possibly be performed on the customer's site, and at a premium price.

EXHIBIT VIII-2

IBM SCHWEIZ

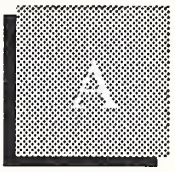
TOP TRAINING REQUIREMENTS

MODEL	SAMPLE	IN-HOUSE	SOFT-WARE	GEN-ERAL	PROG'-ING	OPER-ATIONS	HARD-WARE
38	26	17	2	4	-	1	1
3081	24	5	5	5	3	1	1
3090	13	5	5	2	2	6	2
4381	11	8	1	1	2	-	-
4361	4	3	-	-	-	-	-
3083	3	1	-	-	1	-	-
Others	6	1	1	1	2	1	1
TOTALS/ AVERAGE	87	40	14	13	10	9	5

Interest Level for Training: 7.9

Question 11d: What type of training would you be interested in?

Appendix: Questionnaires



Appendix: Questionnaire

Swiss-French

R.54155 (1-5) Serial No: (6-9) Card No: (10)

Introduction to Switchboard

Bonjour, je m'appelle _____ et je vous téléphone de la part de INPUT, une agence d'études de marchés indépendante de Londres. Nous menons actuellement une enquête pour le compte d'INPUT pour évaluer le niveau général de satisfaction du consommateur en ce qui concerne le matériel informatique et les services après-vente.

Je voudrais parler a votre responsable du traitment des données ou a la personne responsable de la gestion de votre matériel informatique.

A. Pourriez-vous m'indiquer son nom/leurs noms, s'il vous plait?
Write In _____

B. Et son/leur poste?
Write In _____

Introduction to Respondent

Bonjour, je m'appelle _____ et je vous téléphone de la part de Marplan, une agence d'études de marchés indépendente de Londres. Nous menons actuellement une enquête pour le compte d'Input pour évaluer le niveau général de satisfaction du consommateur en ce qui concerne le matériel informatique et les services après-vente. Puis-je vous demander:

Q.A. Quel matériel de fabricant possédez-vous à cette adresse?

Q.B. Desquels êtes-vous responsable:

For all makes coded at Q.A. for which respondent is not responsible, ask:

Q.C. Qui est responsable de cette installation?

	Q.A. INSTALLED	Q.B. RESPONSIBLE	Q.C. NAME/TELEPHONE
IBM	1 C 15	1 C 27	
DEC/Digital	1 C 16	1 C 28	
Comparex	1 C 17	1 C 29	
Olivetti	1 C 18	1 C 30	
Honeywell Bull	1 C 19	1 C 31	
Unisys/Sperry/ Burroughs	1 C 20	1 C 32	
Philips	1 C 21	1 C 33	
ICL	1 C 22	1 C 34	
Hewlett-Packard/HP	1 C 23	1 C 35	
NCR	1 C 24	1 C 36	
Wang	1 C 25	1 C 37	
Siemens	1 C 26	1 C 38	

If none of the systems listed above mentioned, thank and close.

Q.D. Afin de nous assurer que nous avons interrogé des personnes représentant toutes les catégories industrielles, puis-je vous demander de m'indiquer le secteurprincipal d'activité de votre organisation?

Code only one C.39

Fabrication	- sur ordre	1
	- en coutinu	2
Banque et finances		3
Assurances		4

Autres services industriels		5
Distribution	- Gros	6
	- Détail	7
Education/Formation		8
Administration	- Centrale	9
	- Locale	0
Secteur Public	- Santé	X
Loi et ordre public		V
		C.40
Services Publics		1
Autres Services		2
Transports		3
Autres		4

Check quota and select a manufacturer for which respondent has responsibility at Q.B. saying:

Je voudrais maintenant vous poser quelques questions au sujet de votre matériel _____ (Read out make). Les questions ont trait au matériel en soi et à vos facilités d'entretien.

Main Questionnaire

Write in to which this questionnaire refers

_____

Q1a Quel est le numéro de modèle de l'unité centrale de traitment?

Write in _____ (If more than one, take largest.)

Q1b Combien y en a-t-il à cette adresse?

Write in _____

Q1c Combien de terminaux y sont-ils rattachés? Veuillez inclure terminaux intelligents et passifs.

Write in 1) Sur place _____

2) A distance _____

Q1d Quelle capacité de disque utilisez-vous?

Write in _____ KB

_____ MB

_____ GB

Q1e Combien de dispositifs d'entrainement de bandes possédez-vous?

Write in _____

Q1f Combien d'imprimantes possédez-vous?

Write in _____

Q1g Combien estimez-vous au plus près le prix ou la valeur du système total?

Write in _____ (In Local Currency)

Q1h Qui entretient votre matériel? (Read out.)

Fabricant	1
Revendeur	1
Entreprise d'entretien indepéndante sur contrat	1
Votre propre société	1
Autres (Please specify)	1

Q1i Quel type d'entretien de matériel utilisez-vous? (Read out.)

Entretien sur contrat	1
Garantie	1
Période et matériels (T&M)	1
Autres (Please specify)	1

If warranty mentioned at Q1i, ask Q1j.

Q1j Quelle est la durée de la garantie?

Write in _____

Q1k Quel est l'usage principal de cette installation? Informatique en particulier? (Read out.) Code only one.

Systèmes administratifs 1

Utilisée pour développement/ exploitation seulement 1

Echanges internes en temps réel 1

Echanges externes en temps réel 1

Automation industrielle 1

Autres (Please specify) 6

Third Party Maintenance (TPM) (Independent Maintenance)

If respondent uses TPM at Q1h, ask Q2a.
If respondent is not using TPM, ask Q2b.

The following questions apply to your _____ system.

Q2a Pourquoi **utilisez-vous** une entreprise d'entretien indépendante? (Please circle one or more) Tick and rotate start.

Raisons de convenance 1

Coût 1

Une seule source d'entretien pour un matériel multi-vendor 1

Autres (Please specify) 1

If not using TPM at Q1h, ask:

Q2b Pourquoi n'utilisez-vous **pas** une société d'entretien indépendante? (Please circle one or more.) Rotate order.

Vous êtes satisfait du fabricant	1
Le fabricant offre meilleur service (Please comment)	1
L'entreprise indépendante n'entretient pas le logiciel	1
Vous êtes lié au fabricant par contrat (Please comment)	1
La société indépendante n'est pas fiable financièrement	1
N'a pas été contacté/ N'en connait pas	1
A étudié puis rejeté l'entreprise indépendante (Please comment)	1
Crainte de la réaction du vendeur (Please comment)	1
Autres (Please comment)	1

Ask all:

Q2c Préfèreriez-vous que l'entretien de tout votre matériel soit géré par une seule entreprise à chaque implantation?

Oui	1	Q2e
Non	1	Q3 or 3d

If cost mentioned at Q2a, ask Q2d.

Q2d Quelles ont été les économies en moyenne en pourcentage?

Write in _____ %

If yes to Q2c, then ask:

Q2e Préfèrez-vous que le contracteur soit: (Read out.)

	OUI	NON
Votre fournisseur principal de matériel	1	2
L'un de vos fournisseurs de matériel	1	2
Une entreprise d'entretien indépendante	1	2
Autres (Please specify)	1	2

Hardware Service

Je vais vous poser quelques questions relatives à l'entretien du matériel , telles la disponibilité de l'installation, fréquence et répartition des pannes, etc. Ces questions sont liées à votre degré de satisfaction et à ce que vous attendez des services d'entretien pour votre installation.

Question 3: Mainframe and Mini

Q3a Je voudrais que vous m'indiquiez quelle valeur vous accordez à l'importance de l'entretien du matériel et votre degré de satisfaction en conséquence. Tout d'abord, quelle est l'importance de l'entretien du materiel au sein de votre organisation.Veuillez indiquer une note de 0 à 10, ou 0 = aucune importance et 10 = extrèmement important.

Importance Rating_____

Q3b Et quelle note accordez-vous à votre degré de satisfaction de l'entretien du matériel, de nouveau sur une échelle de 0 à 10, ou 0 = satisfaction nulle, et 10 = satisfaction totale.

Satisfaction Rating_____

Q3c Supposons que la disponsibilité du système représente le pourcentage d'heures de travail pendant lesquelles l'installation est opérationnelle, comment noteriez-vousvotre degré de satisfaction en fonction de cette disponibilité sur une echelle de 0 à10, ou 0 = aucune importance, et 10 = extrèmement important.

Satisfaction Rating_____

Q3d Importance Rating_____

Q3e Combien de fois par an votre installation totale vous fait-elle défaut totalement?

Write in _____

Q3f En moyenne, parmi ces pannes, quel pourcentage attribuez-vous aux pannes de matériel, et quel pourcentage aux pannes de logiciel?

Matériel _____

Logiciel _____

Total 100%

Comments: _____

_____

_____

Supposons que le temps d'intervention du materiel represente la durée entre la notification d'une panne et l'arrivée du technicien d'entretien, en moyenne quel est le temps d'intervention que vous estimez raisonnable, et quel celui que vous subissez? Pourriez-vous donner vos réponses en heures de travail, ou 8 heures = une journée de travail. Nous parlons toujours de votre installation principale pendant les heures de travail normales.

Q4a Acceptable _____ Hrs Expérience _____ Hrs

Q4b Quelle est l'importance du **temps d'intervention** pour vous (sur une échelle de 0 à 10 ou 0 = aucune importance, et 10 = extrêmement important)?

Importance Rating_____

Q4c En moyenne, quel **temps de réparation** estimez-vous raisonnable et quel est celui que vous subissez?

Acceptable _____ Hrs Expérience _____ Hrs

Q4d Quelle est l'importance du **temps de réparation** pour vous (sur une echelle de 0 a 10 ou 0 = aucune importance, et 10 = extrêmement important)?

Importance Rating_____

Q5 Je voudrais que vous me notiez d'autres éléments concernant l'entretien du matériel fourni par le fournisseur de votre installation.

Dans chaque cas, je voudrais que vous m'indiquez d'abord le degré d'**importance**de ce facteur au sein de votre organisation, à nouveau sur une échelle de 0 à 10 ou 0 = aucune importance, et **satisfaction** générale sur une échelle de 0 à 10, ou 0 =satisfaction nulle, et 10 = satisfaction totale.

Rotate Order:

	IMPORTANCE	SATISFACTION
Qualité de l'administration du service (ex. facturation)	_____	_____
Formation de l'opérateur au matériel	_____	_____
Disponibilité des pièces de rechange	_____	_____
Procédures de rapportage	_____	_____
Compétence du technicien	_____	_____
Facilité de diagnostics à distance	_____	_____
Assistance téléphonique	_____	_____
Qualité de la documentation	_____	_____
Autres services d'assistance (ex: Planning, Conseils)	_____	_____
Entretien en dehors des heures normales	_____	_____
Exécution du service d'entretien	_____	_____
Aide au technicien	_____	_____
Service de coordination dans un secteur multi-vente	_____	_____

Hardware Service Pricing

Q6a En général, quelle a été en pourcentage, l'augmentation/diminution des frais d'entretien de matériel que vous a facturés votre principal fournisseur en 1986?

Increase _____ % Decrease _____ % No Change 1

Q6b En général, quelle augmentation/diminution de frais en pourcentage vous attendez-vous à payer pour vos frais d'entretien de matériel en 1987 et 1988?

	INCREASE	DECREASE	NO CHANGE
1987	_____ %	_____ %	1
1988	_____ %	_____ %	1

Q6c Quels sont environ vos frais annuels d'entretien de matériel pour votre installation **principale**?

Local Currency _____ State Year 198 ____

Q6d A quel degré êtes-vous satisfait du prix d'entretien de matériel? (Donnez une note entre 0 et 10, ou 0 = satisfaction nulle, et 10 = satisfaction totale).

Satisfaction Rating_____

Q6e Quelle, est l'importance du prix d'entretien de matériel pour vous? (Donnez une note entre 0 et 10, ou 0 = aucune importance, et 10 = extrêmement important).

Importance Rating_____

Q6f Avez-vous des commentaires sur le prix d'entretien du matériel ?

_____

_____

_____

Software Support

Je voudrais maintenant vous poser quelques questions concernant le support de vos logiciel d'exploitation pour votre _____ (confirmez le numéro du modèle et le fabricant).

Q7 Qui fournit l'assistance pour vos installations de logiciel pour cette unité? (Read out.)

Fabricant 1

Vendeur du produit logiciel	1
Sociétés de systèmes	1
Service interne	1
Autres (Please specify)	1

Je voudrais que vous répondiez aux questions suivantes concernant l'assistance en installations de logiciel que vous fournit le fabricant de votre matériel .

(Note to Interviewer: If this is impossible for some reason, get respondent to answer in respect of their most significant source of systems software support—Please identify who that is.)

Main Systems Software Supporter (If not manufacturer)

_____

Q8a D'abord, je voudrais que vous m'indiquiez quelle valeur générale vous accordez à l'importance de l'assistance en installations de logiciel pour votre organisation et votre degré de satisfaction en conséquence.

Tout d'abord, quelle est l'importance de l'assistance en installation de logiciel au sein de votre organisation? Veuillez donner une note entre 0 et 10, ou 0 = aucune importance, et 10 = extrêmement important. Et quelle note accordez-vous à votredegre de satisfaction de l'assistance en installations de logiciel à nouveau entre 0 et10 ou 0 = satisfaction nulle, et 10 = satisfaction totale.

Importance Rating _____ Satisfaction Rating _____

Q8b Quel pourcentage de vos problèmes d'installations de logiciel d'ordre général se resolvent par consultation téléphonique?

_____ %

Q8c Pour vos problèmes d'installations de logiciel qui ne peuvent se répondre par téléphone, en moyenne quel temps d'intervention estimez-vous acceptable (c'est-à-dire le temps d'intervention du technicien d'arriver sur les lieux), et quel tempsd'intervention subissez-vous en realité?

Definition: A working day is 8 hours.

Acceptable _____ Hrs Experience _____ Hrs

Q8d Quelle, est l'importance du **temps d'intervention** pour vous? (Notez de 0 à 10, ou 0 = aucune importance, et 10 = extrêmement important).

Importance Rating _____

Q8e Supposons que le "temps de réparation" soit le temps nécessaire à identifier une solution de "compromis" pour résoudre un problème de logiciel, en moyenne quelltemps de "réparation" estimez-vous raisonnable et quel est celui que vous subissez en réalité?

Definition: A working day is 8 hours.

Accepatble _____ Hrs Experience _____ Hrs

Q8f Quelle est l'importance du **temps de réparation** pour vous? (Notez de 0 à 10, ou 0 = aucune importance, et 10 = extrêmement important).

Importance Rating _____

Q9 Je voudrais que vous me notiez d'autres facteurs concernant l'assistance en installations de logiciel fournie par votre principal **fournisseur**.

Dans chaque cas, je voudrais que vous m'indiquiez d'abord le degréd'**importance** de ce facteur au sein de votre organisation, à nouveau sur uneéchelle de 0 à 10, ou 0 = aucune importance, et 10 = extrêmement important; et ensuite votre degré de **satisfaction** générale sur une échelle de 0 à 10 ou 0 = satisfaction nulle, et 10 = satisfaction totale.

Rotate Order:

	IMPORTANCE RATING	SATISFACTION RATING
Fourniture de mises à jour	_____	_____
Installation des logiciels	_____	_____
Compétence du technicien	_____	_____
Assistance téléphonique Accessibilité du service	_____	_____
Assistance téléphonique Rapidité de la solution au problème	_____	_____
Qualité de la documentation	_____	_____
Autres services d'assistance en logiciels (ex: Planning, Conseils)	_____	_____
Formation aux logiciels	_____	_____

Assistance sur place	_____	_____
Service d'urgence (expert-expert)	_____	_____
Réglage de la capacite du système	_____	_____
Diagnostics à distance	_____	_____
Accès à la base de données des problèmes de logiciels	_____	_____

(Please answer for all Systems Software)

Q10a En général, quelle à été en pourcentage l'augmentation/diminution de vos frais d'assistance en installations de logiciel pour 1986?

Increase _____ % Decrease _____ % No Change 1

Q10b En général, quelle augmentation/diminution en pourcentage vous attendez-vous à payer pour vos frais d'assistance logiciels en 1987 et 1988?

	INCREASE	DECREASE	NO CHANGE
1987	_____ %	_____ %	1
1988	_____ %	_____ %	1

Q10c Quels sont environ vos frais annuels d'assistance en systèmes de logiciels?

Local Currency _____ State Year 198 _____

Q10d A quel degré êtes-vous satisfait du prix d'assistance en systèmes de logiciels? (Donnez une note entre O et 10 ou 0 = satisfaction nulle, en 10 = satisfaction totale).

Satisfaction Rating _____

Q10e Quelle est l'importance du prix d'assistance en systèmes de logiciels pour vous? (Donnez une note entre O et 10 ou 0 = aucune importance, et 10 = extrêmementimportant).

Importance Rating _____

Q10f Avez-vous des commentaires sur le prix d'assistance en systèmes de logiciels?

_____

_____

_____

Other Services

Je suis tout particulièrement intéressé par votre opinion concernant d'autres services ou des services actuels modifiés que vos fournisseurs de services seraient susceptibles d'offrir pour vous aider à améliorer le fonctionnement de votre installation.

(Note to Interviewer: On suppose ici que ces services seraient disponibles moyennant un supplément).

Q11a D'abord, existe-t-il des services supplémentaires dont vous souhaiteriez bénéficier, et pourriez-vous attribuer une note de 0 à 10 en fonction de votre intérêt (0 = peud'intérêt, et 10 = grand intérêt)?

	LEVELS OF INTEREST 0-10
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

(If no response move to Q12b)

Q11b Parmi les services suivants, desquels bénéficiez-vous déjà?

Q11c Quel est votre degré d'intérêt pour ces services entre 0 et 10 (ou 0 = peu d'intérêt, et 10 = grand intérêt)?

If rating is 10 record as X. Read out and record à rating for **all** services listed whether already have or not. Rotate order.

	Q11b HAVE SERVICE	**Q11c LEVEL OF INTEREST 0-10**
Planning de configuration	1	_____
Planning de capacité	1	_____
Planning d'environment (ex: cable)	1	_____
Evaluation logiciels	1	_____
Formation (specifiez)	1	_____

Conseils (specifiez)	1	_____
Planning de réseau	1	_____
Gestion de réseaux	1	_____
Plan de reprise des activités	1	_____
Services médiatiques (ex: fournitures)	1	_____
Gérance informatique	1	_____
Gestion des problèmes	1	_____
Nouvelles installations (Turnkey)	1	_____
Mouvements d'installations (Turnkey)	1	_____
Other (Specify)	1	_____

If education mentioned at Q11b, ask Q11d.

Q11d Quel type de formation vous intéresserait?
Comments: (Write in)

_____

_____

_____

Q12 En règle générale, préfèreriez-vous que chacun de ces services soient tarifés individuellement, ou préfèreriez-vous disposer d'un service tout compris? (Notez ci-dessous).

Tarifé individuellement	1
Tout compris	2
Ne sait pas	3

Q13 Enfin, pensez-vous que vos vendeurs actuels d'assistance soient encore à même de répondre à vos exigences d'ici cinq ans? Comments: (Write in)

_____

_____

_____

Personal Computers

Q14a Avez-vous des ordinateurs individuels (PC)—micro ordinateurs debureau/professionnels/ personnels?

Oui	1	Q14b
Non	2	Close

Q14b Quels sont les **deux** principaux types de PC que vous avez installés?

	I	II
Fabricant	_____	_____
Modèle No.	_____	_____
No. installé	_____	_____

Q14c Qui entretient ce matériel ? (Please circle)

Fabricant	1	1
Revendeur	1	1
Entreprise d'entretien indépendante ou 'TPM'	1	1
Autres (Please specify)	1	1
Votre propre société	5	5

If service by manufacturer, TPM, or dealer (Codes 1, 2 or 3) only ask:

Q14d Quel type d'entretien utilisez-vous? (Please circle)

Accord d'entretien	1
Garantie	2
Periode et matériels (T&M)	3
Autres (Please specify)	4

If warranty mentioned at Q14d, ask Q14e.

Q14e Quelle est la durée de la garantie?

Write in _____ _____

Thank respondent and close interview.

Questionnaire
Swiss-German

R.54155 (1-5) Serial No: (6-9) Card No: (10-11) 0, 1 Country (12)

Introduction to Switchboard

Guten Tag, mein Name ist _____. Ich rufe im Auftrag von INPUT an, einem unabhängigen Marktforschungsinstitut in London. Wir wurden von INPUT beauftragt eine Umfrage durchzuführen, um die generelle Zufriedenheit der Kunden mit ihrem Computer Equipment und den Serviceleistungen zu ermitteln.

Könnten Sie mich mit dem Leiter der Datenverarbeitung bzw der Person, die zuständig für ihr Computersystem ist, verbinden?

A. Könnten Sie mir sagen, wie die Person heisst, mit der Sie mich verbinden werden?
Write In _____

B. Welche Funktion hat diese Person innerhalb der Firma?
Write In _____

Introduction to Respondent

Guten Tag, mein Name ist _____. Ich rufe im Auftrag von Marplan an, einem unabhängigen Marktforschungsinstitut in London. Wir wurden von INPUT beauftragt eine Umfrage durchzuführen, um die generelle Zufriedenheit der Kunden mit ihrem Computer Equipment und den Serviceleistungen zu ermitteln. Könnten Sie mir sagen:

Q.A. Von welchen Herstellern sind die Anlage, die Sie momentan haben?

Q.B. Fur welche Anlagen sind Sie verantwortlich:

For all makes coded at Q.A. for which respondent is not responsible, ask:
Q.C. Wer ist für dieses System verantwortlich?

	Q.A. INSTALLED	Q.B. RESPONSIBLE	Q.C. NAME/TELEPHONE
IBM	1 C 15	1 C 27	
DEC/Digital	1 C 16	1 C 28	

Comparex	1 C 17	1 C 29
Olivetti	1 C 18	1 C 30
Honeywell Bull	1 C 19	1 C 31
Unisys/Sperry/ Burroughs	1 C 20	1 C 32
Philips	1 C 21	1 C 33
ICL	1 C 22	1 C 34
Hewlett-Packard/HP	1 C 23	1 C 35
NCR	1 C 24	1 C 36
Wang	1 C 25	1 C 37
Siemens	1 C 26	1 C 38

If none of the systems listed above mentioned, thank and close.

Q.D. Um sicher zu gehen, dass wir unsere Umfrage mit vielen verschiedenen Industriezeigen durchgeführt haben, hätte ich gerne gewusst mit welcherHaupttätigkeit sich ihre Firma beschäftigt?

Code only one C.39

Herstellung	- Gewinnung	1
	- Verarbeitung	2
Bank- & Finanzwesen		3
Versicherung		4
Sonstige geschäftliche Dienstleistungen		5
Vertrieb	- Grosshandel	6
	- Einzelhandel	7
Schulung		8
Verwaltung	- Zentral	9
	- Lokal0	
Öffentlicher Sektor	- Gesundheit	X

(Gesetz und) Ordnung	V
	C.40
Versorgungsbetriebe	1
Sonstige Dienstleistungen	2
Beforderung/Transport	3
Anderes	4

Check quota and select a manufacturer for which respondent has responsibility at Q.B. saying:

Ich möchte Ihnen jetzt ein paar Fragen zum _____ (Read out make) System stellen. Es geht dabei um die Anlage selbst und Ihre Wartungsvereinbarungen.

Main Questionnaire

Write in to which this questionnaire refers

_____

Q1a Welche Modellnummer hat die Zentraleinheit (CPU)?

Write in _____ (If more than one, take largest.)

Q1b Wieviele Anlagen dieser Art sind unter dieser Adresse installiert?

Write in _____

Q1c Wieviele Terminals sind der angeschlossen? Dazu zählen Intelligenz- und Speicherauszugterminals.

Write in 1) Lokle Anschlussen _____

2) Zweigstellen-Anschlusse _____

Q1d Welche Platten (Disk) kapazität haben Sie?

Write in _____ KB

_____ MB

_____ GB

Q1e Wieviele Bandlaufwerke haben Sie?

Write in _____

Q1f Wieviele Drucker haben Sie?

Write in _____

Q1g Können Sie so gut wie möglich versuchen, den Preis des gesamten Systems zu schätzen?

Write in _____ (In Local Currency)

Q1h Wer führt die Wartung für das System durch? (Read out.)

Hersteller	1
Händler	1
Fremd (Dritt)-Wartungs-Unternehmen	1
Ihre eigene Firma	1
Andere (Please specify) .	1

Q1i Wie warten sie ihre Hardware? (Read out.)

Wartungsvertrag	1
Garantie	1
Berechnung nach Zeit und Materialkosten	1
Andere (Please specify.)	1

If warranty mentioned at Q1i, ask Q1j.

Q1j Für wie lange läuft die Garantie?

Write in _____

Q1k Was ist die Hauptfunktion dieser speziellen Computereinheit? (Read out.) Code only one.

Administationssystem	1

Entwicklungs/ Überprüfungsmaschinen (nicht Produktionsmaschinen)	1
Echtzeit interne Transaktionen	1
Echtzeit Transaktionen— Ausserhalb des Bereichs der Firma	1
Industrielle Automation	1
Anderes (Please specify)	6

Third Party Maintenance (TPM) (Independent Maintenance)

If respondent uses TPM at Q1h, ask Q2a.
If respondent is not using TPM, ask Q2b.

Die nächsten Fragen beziehen sich auf Ihr _____ system.

Q2a Warum **benutzen** Sie eine Fremdwartungsfirma? (Please circle one or more.) Tick and rotate start.

aus praktischen Gründen/Bietet sich an	1
Kosten	1
Eine einzige Watüngsfirma für unterschiedliche Herstellermarken	1
ob der guten Leistung	1
Anderes (Please specify)	1

If not using TPM at Q1h, ask:

Q2b Warum **benutzen** Sie keine Fremdwartungsfirma? (Please circle one or more.) Rotate order.

Zufriedenheit mit der Herstellerfirma	1
Hersteller hat Wartungsvorteile im Vergleich zu (Please comment) Fremdwartungsfirma	1
Fremdwartungsfirma kann keine Softwareunterstützung durchführen	1

Vertraglich an Hersteller gebunden (Please comment)	1
Finanzschwäche der Fremdwartungsfirma	1
Unkenntnis/wurden nicht von Fremdwartungsfirma angesprochen	1
Fremdwartungsfirma wurde erwogen aber abgelehnt (Please comment)	1
Sie fürchten die Reaktion des Herstellers (Please comment)	1
Anderes (Please comment)	1

Ask all:

Q2c Würden Sie es vorziehen alle Wartungsarbeiten von einer Vertragsfirma für jede Lokalität überwachen zu lassen?

Ja	1	Q2e
Nein	1	Q3 or Q3d

If cost mentioned (code 2) at Q2a, ask Q2d.

Q2d Wieviel haben Sie prozentual im Schnitt gespart?

Write in _____ %

If yes to Q2c, then ask:

Q2e Würden Sie es vorziehen, wenn diese Vertragsfirma: (Read out.)

	YES	NO
ihr Haupthardwarelieferant wäre	1	2
Einer ihrer Hardwarelieferanten wäre	1	2
eine Fremdwartungsfirma wäre	1	2
Anderes (Please specify)	1	2

Hardware Service

Ich möchte Ihnen jetzt ein paar Fragen zur Wartung der Hardware stellen, die sich damit beschäftigen, wie leicht das System erhältlich ist, wie die Reaktion und die Schnelligkeit der Repartur etc. sind. Diese Fragen beziehen sich auf Ihre Zufriedenheit bzw. Ihre Erwartungen in bezug auf die Wartung für Ihrssystem.

Question 3: Mainframe and Mini

Q3a Es geht dabei um Ihre generelle Einschäatzung der Witchtigkeit vonHardwarewartung und ihren Grad der Zufriedenheit damit. Sagen Sie mir bittezuerst, wie wichtig Hardwarewartung für Ihre Art der Nutzug ist. Bitte bewertenSie dabei auf einer Skala von 0 bis 10, 0 ist nicht wichtig und 10 ist sehr wichtig. If rating is 10 record as X.

Importance Rating_____

Q3b Und wie würden Sie ihre Zufriedenheit mit der Wartung der Hardware auf einer Skala von 0 bis 10 bewerten? 0 ist extrem schlecht und 10 ausgezeichnet.
If rating is 10 record as X.

Satisfaction Rating_____

Q3c Wenn Sie die Verfügbarkeit des Systems während normaler Arbeitszeit in der das System ioperiert in Prozenten ausdrücken würden, wie würden Sie dann IhreZufriedenheit mit der Verfügbarkeit auf einer Skala von 0 bis 10 bewerten? 0 wärewieder extrem schlecht und 10 ausgezeichnet. Könnten Sie auch die Wichtigkeit,die Sie diesem Faktor beimessen, bewerten? 0 hiesse unwichtig und 10 extrem wichtig.
If rating is 10 record as X.

Satisfaction Rating_____

Q3d Importance Rating_____

Q3e Wie oft fällt ihre Gesamtanlage pro Jahr völlig aus?

Write in _____

Q3f Wieviel Prozent der Systemunterbrechungen, haben Sie durchschnittlich gesehen mit der Software und ineviel Prozent mit der Hardware?

Hardware _____

Software _____

Anderes _____

Total 100%

Comments: _____

_____

_____

Wenn Sie die Reaktionszeit bei der Hardware beurteilen müssten, also die Zeit zwischen der Meldung eines Fehlers und der Ankunft des Technikers, welche Zeitspanne halten Sie durchschnittlich für angemessen und wie lange braucht es in der Praxis? Könnten Sie ihre Antwort bitte in Arbeitsstunden angeben, 8 Stunden entsprechen einem Arbeitstag. Es geht also immer noch um ihr Hauptsystem während der nomalen Arbeitszeit.

Q4a Acceptable _____ Hrs Experience _____ Hrs

Q4b Wie wichtig ist Ihnen die **Reaktionszeit**? (Bitte bewerten Sie wieder auf einer Skala von 0 bis 10, 0 = unwichtig; 10 extrem wichtig).
If rating is 10 record as X.

Importance Rating_____

Q4c Welche Reparaturdauer finden Sie im Durchschnitt akzeptabel und wie lange dauert die Reparatur Ihren Erfahrungen nach?

Acceptable _____ Hrs Experience _____ Hrs

Q4d Wie wichtig ist Ihnen die **Reparaturdauer** (Bitte bewerten Sie wieder auf einer Skala von 0 bis 10, 0 = völlig unwichtig; 10 extrem wichtig).
If rating is 10 record as X.

Importance Rating_____

Q5 Jetzt möchte ich Sie bitten, ein paar weitere Faktoren, die die Wartung der Hardware betreffen zu beurteilen. Dabei geht es um Ihren Systemlieferanten.

Bitte sagen Sie mir zu jedem Faktor zuerst wie **wichtig** er für ihre Operationsweise ist auf einer Skala von 0 = völlig unwichtig bis 10 = extrem wichtig: undanschliessend Ihren generellen Grad der **Zufriedenheit** wobei 0 = extrem schlecht und 10 ausgezeichnet bedeuten. If rating is 10 record as X.

Rotate Order:

	IMPORTANCE	SATISFACTION
Qualität der Serviceadministration (z. B. Rechnungen)	_____	_____

Schulung in bezug auf Hardware für die, die Maschine bedienen	_____	_____
Vorhandensein von Ersatzteilen	_____	_____
Eskalation von Problemen	_____	_____
Grad der technischen Fähigkeiten	_____	_____
Unterstützung durch Ferndiagnose	_____	_____
Telefonische Hilfeleistung	_____	_____
Qualität der Dokumentation	_____	_____
Andere H/W Hilfeleistungen (z.B. Planning, Beratung)	_____	_____
Service ausserhalb normaler Arbeitsstunden	_____	_____
Bearbeitung der Fehlermeldung	_____	_____
Unterstützung für den Techniker	_____	_____
Kundendienstzusammenarbeit mit mehreren Lieferanten	_____	_____

Hardware Service Pricing

Q6a Wieviel Prozent mehr/oder weniger haben Sie bei Ihrem Hauptlieferanten im Jahre 86 generell für Hardwarewartung bezahlt?

Increase _____ % Decrease _____ % No Change 1

Q6b Wieviel Prozent mehr oder weniger erwarten Sie generell an Kosten für die Hardwarewartung in den Jahren 87 und 88?

	INCREASE	DECREASE	NO CHANGE
1987	_____ %	_____ %	1
1988	_____ %	_____ %	1

Q6c Wie hoch ist Ihre jährliche Ausgabe für die Wartung des **Hauptsystems durchschnittlich**?

Local Currency _____ State Year 198 ____

Q6d Wie zufrieden sind Sie mit den Kosten für die Hardwarewartung (Bitte bewerten Sie von 0 = völlig unzufrieden bis 10 = völlig zufrieden).

Satisfaction Rating _____

Q6e Wie wichtig ist Ihnen der Preis der Hardwarewartung (Bitte bewerten Sie auf einer Skala von 0 = völlig unwichtig bis 10 = sehr wichtig).
If rating is 10 record as X.

Importance Rating_____

Q6f Möchten Sie irgendetwas zu den Kosten der Hardwarewartung sagen?

_____

_____

_____

Software Support

Ich möchte Ihnen jetzt ein paar Fragen zu der Unterstützung/Wartung in bezug auf Systemsoftware für Ihr _____ (Confirm manufacturer and model number) stellen.

Q7 Wer unterstützt Sie bei der Systemsoftware für diese Anlage?
(Read out.)

Hersteller	1
Softwarehändler	1
Systemfirma	1
Innerhalb des Hauses	1
Anderes (Please specify)	1

Die folgenden Fragen beziehen sich auf die Unterstützung, die Sie bei der Systemsoftware von dem Hersteller ihrer Anlage bekommen.

(Note to Interviewer: If this is impossible for some reason, get respondent to answer in respect of their most significant source of systems software support—Please identify who that is.)

Main Systems Software Supporter (If not manufacturer)

_____

Q8a Zuerst geht es dabei um Ihre generelle Einschätzung der Wichtigkeit von Systemsoftware-Unterstützung und ihren Grad der Zufriedenheit damit.

Sagen Sie mir bitte zuerst, wie wichtig Systemsoftware-Unterstützung für Ihre Operierweise ist. Bitte bewerten Sie dabei auf einer Skala von 0 bis 10, 0 = völligunwichtig und 10 extrem wichtig. Und wie würden Sie Ihre Zufriedenheit mit derSystemsoftware-Unterstützung auf einer Skala von 0 = extrem schlecht bis 10 = exzellent bewerten?
If rating is 10 record as X.

Importance Rating _____ Satisfaction Rating _____

Q8b Wieviel Prozent Ihrer Systemsoftware-Probleme werden durchschnittlich per Telefon behoben?

_____ %

Q8c Welche Reaktionszeit halten Sie bei den Problemen, die nicht per Telefon gelöst werden können, durchschnittlich für angemessen? (z. B. die Zeit, die ein Software-Fachmann braucht, bis er am Ort ist), und wie lange dauert es normalerweise, bis jemand da ist?

Definition: A working day is 8 hours.

Acceptable _____ Hrs Experience _____ Hrs

Q8d Wie wichtig ist Ihnen die Reparaturdauer ("Fix Time")? (Bitte bewerten Sie wieder auf einer Skala von 0 = völlig unwichtig bis 10 extrem wichtig).
If rating is 10 record as X.

Importance Rating _____

Q8e Wenn man die Zeit, die es braucht, bis man einen Lösungsweg fur einSoftwareproblem gefunden hat als "Fix-Zeit" bezeichnen würde, welche Fix-Zeitfinden Sie im Schnitt akze ptabel und wie lange dauert es in der Praxis?

Definition: A working day is 8 hours.

Accepatble _____ Hrs Experience _____ Hrs

Q8f Wie wichtig ist Ihnen die Reparaturdauer ("Fix Time"). (Bitte bewerten Sie wieder auf einer Skala von 0 = völlig unwichtig bis 10 extrem wichtig).

Importance Rating _____

Q9 Jetzt möchte ich Sie bitten, ein paar weitere Faktoren, die die Systemsoftware- Unterstützung betrifft, zu beurteilen. Dabei geht es wieder um Ihren **Hauptlieferanten.**

Bitte sagen Sie mir zu jedem Faktor zuerst wie **wichtig** er für Ihre Operationsweise ist, dabei gibt es wieder eine Skala von 0 = völlig unwichtig bis 10 = extremwichtig: und anschliessend Ihren generellen Grad der **Zufriedenheit** wobei 0 = extrem schlecht und 10 = exzellent bedeutet.
If rating is 10 record as X.

Rotate Order:

	IMPORTANCE RATING	SATISFACTION RATING
Beschaffung von Updates	_____	_____
Software Installation	_____	_____
Technische Fähigkeiten der Techniker	_____	_____
Telefonische Hilfeleistung— Zugänglichkeit des Service	_____	_____
Telefonische Hilfeleistung— Schnelligkeit der Problembewaltigung	_____	_____
Qualität der Dokumentation	_____	_____
Andere S/W Hilfeleistungen (z.b. Planning/Beratung)	_____	_____
Software Training	_____	_____
Hilfe am Ort	_____	_____
Heisser Draht/Hotline (von Fachmann zu Fachmann Service)	_____	_____
Systemkapazitätsabstimmung	_____	_____
Ferndiagnose	_____	_____
Zugang zu Software-Problem Datenbank	_____	_____

(Please answer for all Systems Software)

Q10a Wieviel Prozent mehr oder weniger haben Sie im Jahre 86 generell für die Systemsoftware-Unterstützung bezahlt?

Increase _____ % Decrease _____ % No Change 1

Q10b Wieviel Prozent mehr oder weniger erwarten Sie generell an Kosten für Ihre Systemsoftware-Unterstützungskosten in den Jahren 87 und 88?

	INCREASE	DECREASE	NO CHANGE
1987	_____ %	_____ %	1
1988	_____ %	_____ %	1

Q10c Wie hoch ist Ihre jährliche Ausgabe für Systemsoftware-Unterstützungdurchschnittlich?

Local Currency _____ State Year 198 _____

Q10d Wie zufrieden sind Sie mit den Kosten für die Software-Unterstützung? (Bitte bewerten Sie von 0 = völlig unzufrieden bis 10 = völlig zufrieden).
If rating is 10 record as X.

Satisfaction Rating _____

Q10e Wie wichtig ist Ihnen der Preis für Systemsoftware-Unterstützung? (Bitte bewerten Sie auf einer Skala vono = völlig unwichtig bis 10 extrem wichtig).
If rating is 10 record as X.

Importance Rating _____

Q10f Möchten Sie irgendetwas zu den Kosten für Systemsoftware-Unterstützung sagen?

_____

_____

_____

Other Services

Wir interessieren uns besonders für Ihre Ansicht in bezug auf andere Serviceleistungen oder modifizierte momentane Serviceangebote, die Ihre Servicefirma bieten könnte und somit den einwandfreien Lauf Ihres Systems verbessern könnte.

(Note to Interviewer: The assumption here is that these services would be provided at extra cost).

Q11a Gibt es irgendwelche zusätzlichen Leistungen, die Sie begrüssen würden und wie hoch ist Ihr Interesse daran auf einer Skala von 0 = geringes Interesse bis 10 = sehrgrosses Interesse?
If rating is 10 record as X.

	LEVELS OF INTEREST 0-10
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

(If no response move to Q12b)

Q11b Welche der folgenden Serviceleistungen haben sie?

Q11c Wie hoch ist Ihr Interesse an diesen Serviceleistungen auf einer Skala vou 0 bis 10?

If rating is 10 record as X. Read out and record a rating for **all** services listed whether already have or not. Rotate order.

	Q11b HAVE SERVICE	Q11c LEVEL OF INTEREST 0-10
Konfigurationsplanning	1	_____
Kapazitätsplanning	1	_____
Innerhäusliche Planung (inklusive Kabellegung)	1	_____
Software-Auswertung	1	_____
Schulung (Specify)	1	_____
Beratung (Specify)	1	_____
Netzwerkplanung	1	_____
Netzwerkmanagement	1	_____
Wiederherstellung bei Desaster (disaster recovery)	1	_____

Medien Service (z.b. Beschaffung)	1	_____
Anlagenmanagement/verwaltung	1	_____
Problembewältigung	1	_____
Neue Installation (Turnkey)	1	_____
Beweglichkeit der Installation (Turnkey)	1	_____
Other (Specify)	1	_____

If training mentioned at Q11b, ask Q11d.

Q11d Welche Art von Schulung wäre für Sie von Interesse?
Comments: (Write in)

_____

_____

_____

Q12 Würden Sie es generell gesehen bevorzugen, wenn jede dieser Serviceleistungen getrennt berechnet würde oder würden Sie ein insgesamtes Serviceangebot alsGanzes bevorzugen? (Record below)

Individueller Preis	1
Gebundelt	2
Weiss nicht	3

Q13 Als letztes möchten wir Sie fragen, wie gut sie den Service Ihres jetzigen Dienstleistungshändlers in fünf Jahren einschätzen? Comments: (Write in)

_____

_____

_____

Personal Computers

Q14a Haben Sie irgenwelche PC's Desktop/Business oder Personal Microcomputer?

Ja	1	Q14b
Nein	2	Close

Q14b Welch **zwei** Haupt-Arten haben Sie installiert?

	I	II
Hersteller	_____	_____
Model Number	_____	_____
Anzahl installierter PC's	_____	_____

Q14c Wer wartet diese Geräte? (Please circle)

	I	II
Hersteller	1	1
Händler	1	1
Fremd (Dritt)Wartungs—Unternehmen	1	1
Andere (Please specify)	1	1
Ihre eigene Firma	5	5

If service by manufacturer, TPM, or dealer only ask:

Q14d Wie warten Sie die Anlage? (Please circle)

Wartungsvertrag	1
Garantie	2
Berechnung nach Zeit und Materialkosten	3
Anderes (Please specify)	4

If warranty mentioned at Q14d, ask Q14e.

Q14e Für wie lange?

Write in _____ _____

Thank respondent and close interview.

Questionnaire
Swiss-Italian

R.54155 (1-5) Serial No: (6-9) Card No: (10-11) 0, 1 Country (12)

Introduction to Switchboard

Buongiorno il mio nome e _____ dalla INPUT di Londra, un 'agenzia indipendente per la Ricera di mercato. Stiamo facendo un indagine per conto di INPUT per verificare il livello di soddisfazione deiclienti per quanto riguarda l'attrezzatura e il servizio. Vorrei parlare con il manager della trasmissione dati oppure la persona responsabile per il funzionamento dei vostri computers.

A. Potrebbe darmi il loro nome?
Write In _____

B. e posizione
Write In _____

Introduction to Respondent

Buongiorno il mio nome e _____ dalla Marplan di Londra, agenzia indipendente per la Ricerca di mercato. Stiamo facendo un indagine per INPUT per verificare il livello di soddisfazione deiclienti per quanto riguarda l'attrezzatura e il servizio. Vorrei farle alcune domande.

Q.A. Che tipo di attrezzatura avete in ditta?

Q.B. E di quale e lei responsabile?

For all makes coded at Q.A. for which respondent is not responsible, ask:
Q.C. Chi e'responsibile per questo sistema?

	Q.A. INSTALLED	Q.B. RESPONSIBLE	Q.C. NAME/TELEPHONE
IBM	1 C 15	1 C 27	
DEC/Digital	1 C 16	1 C 28	
Comparex	1 C 17	1 C 29	
Olivetti	1 C 18	1 C 30	

Honeywell Bull	1 C 19	1 C 31
Unisys/Sperry/ Burroughs	1 C 20	1 C 32
Philips	1 C 21	1 C 33
ICL	1 C 22	1 C 34
Hewlett-Packard/HP	1 C 23	1 C 35
NCR	1 C 24	1 C 36
Wang	1 C 25	1 C 37
Siemens	1 C 26	1 C 38

If none of the systems listed above mentioned, thank and close.

Q.D. Per assicurarci che abbiamo consultato societa' di tipo diverso vorrei chiederle come descriverebbe l'attività **principale** della sua ditta?

Code only one C.39

Fabbricazione	- Descrete	1
	- Process	2
Bancaria e Finanze		3
Assicurazione		4
Altri servizi commerciali		5
Distribizione	- Ingrosso	6
	- Dettaglio	7
Istruzione		8
Governativa	- Centrale	9
	- Locale	0
Settore pubblico	- sanita'	X
Legge e sicurezza		V

C.40

Settore pubblico	1
Altri servizi	2
Trasporto	3
Altri	4
Building/Construction	5

Check quota and select a manufacturer for which respondent has responsibility at Q.B. saying:

Vorrei ora farle alcune domande circa il suo sistema _____ (Read out make). Le domande saranno sulle attrezzature stesse e il tipo di manutenzione.

Main Questionnaire

Write in to which this questionnaire refers

_____

Q1a Quale e'il numero del tipo di modello che avete?

Write in _____ (If more than one, take largest.)

Q1b Quanti sono installati a queste sede?

Write in _____

Q1c Quanti terminali sono collegati? Per favore includere tutti i terminali sia con intelligenza che senza?

Write in 1) Locali _____

2) Distaccati _____

Q1d Qual'e la capacità disco che avete?

Write in _____ KB

_____ MB

_____ GB

Q1e Quanti drive per nastro avete?

Write in _____

Q1f Quante stampanti avete?

Write in _____

Q1g Qual'e all'incirca il valore totale del vostro sistema?

Write in _____ (In Local Currency)

Q1h Chi fa la manutenzione dell' attrezzatura? (Read out.)

Produttore	1
Fornitore	1
Altra societa di manutenzione	1
La vostra ditta	1
Altri (Please specify)	1

Q1i Che tipo di manutenzione avete per l'hardware? (Read out.)

Contratto di manutenzione	1
Garanzia	1
T e M Tempo e Materiali	1
Altri (Please specify.)	1

If warranty mentioned at Q1i, ask Q1j.

Q1j Per quanto tempo e' la garanzia?

Write in _____

Q1k Qual e l'uso principale dell' adozione di questo tipo di computer? (Read out.) Code only one.

Sistemi amministrativi	1

Utilizzato solo per lo sviluppo	1
Tempo per transazioni interne	1
Tempo per transazioni esterne	1
Automatizzazione industriale	1
Altri (Please specify)	6

Third Party Maintenance (TPM) (Independent Maintenance)

If respondent uses TPM at Q1h, ask Q2a.
If respondent is not using TPM, ask Q2b.

Q2a Perche usate altra societa di manutenzione?
(Please circle one or more) Tick and rotate start.

Convenienza	1
Cost	1
Solo un tipo di manutenzione per attrezzature diverse	1
Efficienza	1
Altri (Please specify)	1

If not using TPM at Q1h, ask:

Q2b Perche non usate altra societa di manutenzione?
(Please circle one or more) Rotate order.

Siete soddisfatti del produttore	1
Il produttore offre dei vantaggi a confronto dell'altra societa (Please comment)	1
L'altra societa non e in grado di fornire il servizio software	1
Siete legati al produttore con contratto (Please comment)	1

Debolezza finanzaria dell' altra societa	1
Non a conoscenza/mai contattato da altra societa	1
Valutato e rifiutato altra societa (Please comment)	1
Paura della reazione del fornitore (Please comment)	1
Altri (Please comment)	1

Ask all:

Q2c Preferite tutta la manutenzione fatta da un'unico fornitore per ogni sede?

Si	1	Q2e
No	1	Q3 or Q3d

If cost mentioned (code 2) at Q2a, ask Q2d.

Q2d Qual è stato il risparmio in percentuale?

Write in _____ %

If yes to Q2c, then ask:

Q2e Preferite che il fornitore sia: (Read out.)

	YES	NO
Il vostro fornitore principale di hardware	1	2
Uno dei vostri fornitori di hardware	1	2
Altra societa	1	2
Altri (Please specify)	1	2

Hardware Service

Vorrei farle alcune domande sul servizio hardware, circa la disponsibilita dei sistemi, tipo di qualita di servizio e tempi di reparazione. Queste domande stanno relative al vostro tipo di soddisfazione, aspettative dal servizio di manutenzione del vostro sistema.

Question 3: Mainframe and Mini

Q3a Vorrei il suo parere sull' importanza della manutenzione del hardware e quanto ne e lei soddisfatto? Innanzi tutto, quanto e importante la manutenzione al hardware nelle vostre operazioni? Prego valutara da 0 a 10 (0 = importante e 10 = moltoimportante). If rating is 10 record as X.

Importance Rating _____

Q3b Come valuterebbe lei il livello di soddisfazione nella manutenzione dell'hardware se 0 fosse pessimo e 10 fosse ottimo?
If rating is 10 record as X.

Satisfaction Rating _____

Q3c Se definiamo "la disponibilita del sistema" come percentuale delle ore normali di lavoro in cui il sistema e funzionante, come graduerebbe la sua soddisfazione circa questa disponibilita (considerando una graduatoria da 0 a 10 dove 0 e pessimo e 10ottimo) e che importanza darebbe a questo fattore su una scala da: 0 per nienteimportante e 10 estremamente importante.
If rating is 10 record as X.

Satisfaction Rating _____

Q3d Importance Rating _____

Q3e Quante volte all'anno il vostro sistema totale e' fuori uso completamente?

Write in _____

Q3f In media, quale percentale delle interuzioni del sistema sono da attribuirsi al hardware e quale percentuale al software?

Hardware _____

Software _____

Altri _____

Total 100%

Comments: _____

_____

_____

Se definiamo "l'hardware response" time come tempo che passa dal momento in cui si riporta il guasto al momento in cui arriva il technico, in media quanto tempo impiegato pensa che sia accetabile? e, in in pratica quanto tempo deve aspettare? Prego dare la risposta, considerando una giornata lavorativa di otto ore tenendo conto che stiamo ancora parlando del vostro sistema principale durante normali ore di lavoro?

Q4a Acceptable _____ Hrs Experience _____ Hrs

Q4b Quanto importante e'il tempo impiegato per avere l'intervento del technico—valutando su una scale considerando 0 = per nulla importante e 10 = estremamenteimportante? If rating is 10 record as X.

Importance Rating_____

Q4c In media qual' e il tempo di riparazione che considera accettabile e quale invece e'la sua esperienza in pratica?

Acceptable _____ Hrs Experience _____ Hrs

Q4d Quanto importante e per lei il tempo impiegato per la riparazione? Prego valutare su una scala considerando 0 = per niente importante e 10 = molto importante.
If rating is 10 record as X.

Importance Rating_____

Q5 Vorrei che mi indicasse ulteriori fattori relativi alla manutenzione del hardware dal vostro fornitore di hardware.

In ogni caso gradirei che mi dicesse prima quanto e importante tale fattore in relazione alla vostra operazione, ancora su una scala che considera 0 = nonimportante e poi il grado generale di soddisfazione considerando 0 = pessimo e 10 = ottimo. If rating is 10 record as X.

Rotate Order:

	IMPORTANCE	SATISFACTION
Qualita di servizio amministrativo (fatturazione)	_____	_____
Addestramento dell'operatore sul hardware	_____	_____

Disponsibilita' di pezzi di ricambio	_____	_____
Incremento dei problemi	_____	_____
Livello dell'abilita del technico	_____	_____
Assistenza diagnostica a distanza	_____	_____
Assistenza telefonica	_____	_____
Qualita della documentazione	_____	_____
Altri servizi di assistenza (pianificazione consulenza hardware)	_____	_____
Servizio fuori dalle ore normali	_____	_____
Trattamento fuori della ore normali	_____	_____
Assistenza per l'ingeniere	_____	_____
Co-ordinazione di servizio in ambiente multi vendile	_____	_____

Hardware Service Pricing

Q6a In generale quale percentuale di aumento/diminuzione avete pagato per spese di manutenzione del vostro hardware nel 1986 al vostro fornitore principale?

Increase _____ % Decrease _____ % No Change 1

Q6b In generale, quale percentuale di aumento/diminuzione vi aspettate di pagare per le spese di manutenzione del vostro hardware nel 1987 e 1988?

	INCREASE	DECREASE	NO CHANGE
1987	_____ %	_____ %	1
1988	_____ %	_____ %	1

Q6c Aprossimativamente quale e' la spesa annuale per la manutenzione di hardware del vostro sistema principale?

Local Currency _____ State Year 198 ____

Q6d Quanto siete soddisfatti del costo della manutenzione del hardware? Prego valutatesu una scale considerando 0 = per niente soddisfatto e 10 = molto sodisfatto. If rating is 10 record as X.

Satisfaction Rating _____

Q6e Quanto ha importanza il costo della manutenzione del hardware. (Prego valutare su una scale considerando 0 = per niente importante e 10 = molto importante).
If rating is 10 record as X.

Importance Rating _____

Q6f Avete dei commenti sul costo della manutenzione del hardware?

_____

_____

_____

Software Support

Vorrei farle alcune domande circa l'assistenza del software per il vostro sistema _____ (condermare tipo e modello).

Q7 Chi vi offre assistenza per il software del sistema?
(Read out.)

Il produttore	1
Il fornitore del software	1
La casa fornitrice del sistema	1
La vostra ditta	1
Altri (Please specify)	1

Vorrei che rispondesse alle seguenti domande facendo riferimento all' assistenza software dei sistemi che avete dal produttore delle vostre attrezzature.

(Note to Interviewer: If this is impossible for some reason, get respondent to answer in respect of their most significant source of systems software support—Please identify who that is.)

Main Systems Software Supporter (If not manufacturer)

_____

Q8a Innanzitutto, vorrei chiederle quanto importante guidica lei l'assistenza del software e il suo grado relativ di soddisfazione.

Primo, quanto e importante l'assistenza del software nelle sue operazioni. Prego valutare su una scala considerando 0 = per niente importante e 10 = moltoimportante. E poi quale e il suo grado di soddisfazione considerando 0 = pessimo e 10 = ottimo.
If rating is 10 record as X.

Importance Rating _____ Satisfaction Rating _____

Q8b Quale percentuale di problemi del vostro software vengono risolti al telefono?

_____ %

Q8c Per quei problemi di software che non possono essere risolti al telefono, in generale quale tempo impiegato a rispondere trovate accetabile. (Il tempo impiegato dal tecnico software per arrivare sul luogo), e quale tipo di servizio avete in pratica?

Definition: A working day is 8 hours.

Acceptable _____ Hrs Experience _____ Hrs

Q8d Quanto importante e il tempo impiegato per l'intervento del tecnico. (Prego valutare su una scala da 0 al 10).
If rating is 10 record as X.

Importance Rating _____

Q8e Se definiamo "fix time" il tempo che ci vuole per risolvere il problema di software, in gener ale quanto tempo pensate sia accettabile e quanto tempo invece vieneimpiegato in pratica?

Definition: A working day is 8 hours.

Accepatble _____ Hrs Experience _____ Hrs

Q8f Quanto importante e per lei il tempo impiegato per il "fix time". Prego valutare su una scala da 0 a 10.

Importance Rating _____

Q9 Vorrei che indicasse ulterori relativi all'assistenza software dal vastro fornitore principale.

In ogni caso, vorrei che mi dicesse quanto importante e questo fattore in relazione alla vostra operazione, ancora su una scala da 0 a 10. Considerando 0 = per nienteimportante e 10 = molto im grado in generale di soddisfazioneconsiderando 0 = pessimo e 10 = ottimo.
If rating is 10 record as X.

Rotate Order:

	IMPORTANCE RATING	SATISFACTION RATING
Fornitura di aggiornamento	_____	_____
Installazione software	_____	_____
Abilita' tecnica del tecnico	_____	_____
Assistenza telefonica— accessibilita' del servizio	_____	_____
Assistenza telefonica— Velocita della soluzione del problema	_____	_____
Qualita' della documentazione	_____	_____
Altri servizi di assistenza software (pianificazione, consulenza)	_____	_____
Addestramento software	_____	_____
Assistenza su luogo	_____	_____
Servizio telefonica immediato	_____	_____
Messa a punto della capacita' del sistema	_____	_____
Diagnosi a distanza	_____	_____
Accesso al database dei problemi software	_____	_____

(Please answer for all Systems Software)

Q10a In generale, quale percentuale di aumento/diminuzione avete pagato per le spese di assistenza per systems software in 1986?

Increase _____ % Decrease _____ % No Change 1

Q10b In generale, quale percentuale di aumento/diminuzione vi aspettate di pagare per spese di assistenza systems software nel 1987 e 1988?

	INCREASE	DECREASE	NO CHANGE
1987	_____ %	_____ %	1
1988	_____ %	_____ %	1

Q10c Approssimativamente quale e la spesa annuale per al manutenzione del vostro systems software?

Local Currency _____ State Year 198 _____

Q10d Quanto siete soddisfatti del costo della manutenzione del systems software? Pregovalutare su una scala considerando 0 = per niente soddisfatto e 10 = moltosoddisfatto. If rating is 10 record as X.

Satisfaction Rating _____

Q10e Quanta importanza ha il costo della manutenzione del software. (Prego valuare su una scala considerando 0 = per niente importante e 10 = molto importante.)
If rating is 10 record as X.

Importance Rating _____

Q10f Avete dei commenti sul costo della manutenzione del software?

_____

_____

_____

Other Services

Gradirei avere la sua opinione su altri servizi o attuali servizi modificati che i vostri fornitori potrebbero offrire per migliorare il funzionamento dei vostri sistemi.

(Note to Interviewer: Presumiamo che questi servizi siano forniti a un costo extra.)

Q11a Primo, ci sono ulteriori servizi che vorreste avere? E quale e il vostre grado d'interesse e 10 = molto interesse.
If rating is 10 record as X.

	LEVELS OF INTEREST 0-10
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

(If no response move to Q12b)

Q11b Quali dei seguenti servizi avete?

Q11c Quali' e il vostro livello d'interesse **nei servizi** su una scala 0-10.

If rating is 10 record as X. Read out and record a rating for **all** services listed whether already have or not. Rotate order.

	Q11b HAVE SERVICE	Q11c LEVEL OF INTEREST 0-10
Piano di configurazione	1	_____
Piano di capacita'	1	_____
Piano ambientale (compresso cablaggio)	1	_____
Valutazione del software	1	_____
Training (Specificare)	1	_____
Consulenza (Specificare)	1	_____
Piano della Rete (Network)	1	_____
Amministrazione della Rete (Network)	1	_____
DiRecupero errori	1	_____
Servizi "Media" (forniture)	1	_____
Amministrazione delle attrezzature (Facilties Management)	1	_____
Amministrazione dei problemi	1	_____

Installazione nuova (Turnkey)	1	_____
Movimenti di installazione (Turnkey)	1	_____
Other (Specify)	1	_____

If training mentioned at Q11b, ask Q11d.

Q11d A quale tipo di educazione sareste interessati?
Comments: (Write in)

_____

_____

_____

Q12 In generale, preferireste che ciascuno di questi servizi abbia un prezzo individuale o preferi reste, un prezzo forfettario? (Record below)

Prezzo individuale	1
Prezzo forfettario	2
Non lo so	3

Q13 Per finire, fra cinque anni come pensate che il vostro attuale fornitore di appoggio sara in grado di affrontare le vostre esigenze? Comments: (Write in)

_____

_____

_____

Personal Computers

Q14a Avete dei PC—da scrivania/per business/micro computer personali?

Si	1	Q14b
No	2	Close

Q14b Quali sono i due tipi principali di PC che avete installato?

	I	II
La marca	_____	_____
Numero di modello	_____	_____
Quantita installata	_____	_____

Q14c Chi fa la manutenzione a questa attrezzatura? (Please circle)

Produttore	1	1
Fornitore	1	1
Altra societa di manutenzione	1	1
Altri (Please specify)	1	1
La vostra ditta	5	5

If service by manufacturer, TPM, or dealer only ask:

Q14d Che tipo di manutenzione avete? (Please circle)

Contratto di manutenzione	1
Garanzia	2
T&M Tempo e materiali	3
Altri (Please specify)	4

If warranty mentioned at Q14d, ask Q14e.

Q14e Per quanto tempo e la garanzia?

Write in _____ _____

Thank respondent and close interview.